

THESIS



**A STUDY OF FOREIGN DIRECT INVESTMENT
(FDI) FLOWS FROM GERMANY TO INDIA
WITH REFERENCE TO INFORMATION
TECHNOLOGY (IT) SECTOR**

**ABSTRACT
THESIS**

SUBMITTED FOR THE AWARD OF THE DEGREE OF

Doctor of Philosophy
IN
COMMERCE

BY

SUBIA KHAN

Under the Supervision of

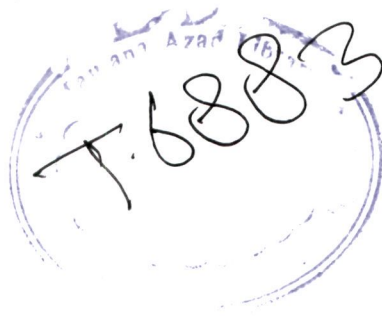
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This thesis titled “German FDI to India with special reference to IT sector” proposes that there is a positive relationship between German FDI and different parameters of the host economy i.e. market size, trade balance, service sector (IT enabled services) and Inflation rate. It also proposes that there is a dialectic and spiraling effect of FDI vis-à-vis fundamentals of an economy. The study mainly concentrates on the German FDI inflows to India related specifically to the IT sector, revealing the contribution of German FDI in the overall development of the economy. It also pinpoints the reasons of the decline in the FDI flows in late 90’s and also suggests the future strategies to increase the FDI inflows to country. The present research work is mainly based on the secondary data collected from various sources like financial and business dailies, periodicals, magazines and journals.

FDI like any other concepts can be defined through the microeconomic approach or macroeconomic approaches. Micro-economic approach attempts to explain why some firms of one country are successful in penetrating into other markets and others fail while the macro-economic approach tries to examine why firms seek international expansion and what advantages it have. Theories of FDI suggest that for potential developing countries like India firm size, profitability, trade, interest rates, economy and inflation and it’s economic and foreign policies wield significant influence in attracting FDI. This study emphasizes on the latter approach and focuses on the impact of macro-economic variables on FDI and seeks to explain the recent increase of inflow of FDI into India with greater emphasis on inflows from Germany especially in IT sector.

Although the greater chunk of FDI comes to the developing countries but India is unable to attract the expected share in it. India receives lower rate of FDI as compared to the other developing countries in Asia. The ratio of investment to GDP has been much lower than that of Latin America and Asia. The study focuses on the main challenges faced by the governments to identify the factors which restrains the flow of FDI as well as the factors that could enhance FDI inflows. It also highlights the policies that should be formulated and implemented to accelerate the positive impact of FDI flows and reduce its negative affects. This paper has five chapters and

attempts to study the FDI flow to India in a globalising economic environment with greater emphasis on inflow from Germany, particularly in IT sector. Chapter one consists of seven sections with an attempt to give a brief introduction of FDI and its importance to India especially German FDI inflows. In chapter two the role and significance of FDI to the Indian economy have been discussed at length in the light of various types and theories of FDI. In Chapter four we have discussed trends in German FDI flows to India since liberalization through the analytical study of data on German FDI flows- industry, sector and state wise. Further elaboration of the finding, results, problems and suggestion has been made in Chapter five that highlights the problems faced by the foreign investors in making investments in India and points out the reasons why India fails to attract the FDI from Germany. It also provides the suggestions for the improvements.

There are three main schools of thoughts related to FDI that have been discussed at length in chapter 2. First one is the market imperfections hypothesis [Kindleberger (1969), Horaguchi and Toyne (1990)] that states that FDI is the Direct result of an imperfect Market of the world. Second, theorist says that the multinationals replace external markets with more efficient internal markets (Rugman 1985, 1986). Third one is, the electric approach to international production, which says that the emergence of FDI is the outcome of changes in the pattern of ownership internationalization of economies and corporations and locational advantages [Dunning (1985, 1986, 1988)].

Since above theories lack an empirical evidence for explaining the emergence and impact of FDI, a more scientific approach is used in this work to show the impact of FDI on the host economy. The approach is simple to study the concept of FDI from different dimensions and angle and then approach to the main agenda of the study.

Model Specification:

The model adopted is compatible with the prevalent theories of international production where demand for inward FDI depends on variety of features of host country. This model discriminates three types of impacts on inward FDI: First Domestic market characteristic expressed by market size and the direction of trade

flows. The market size (MRKTSZ) is measured by GDP of the host country and highlights the significance of large market for efficient utilization of resources and leverage of economies of scales. A direct relationship is expected between market size and FDI inflows.

The second parameter for study of FDI on the host economy comes from trade balance. The relationship between the direction of the host country trade balance (TRDBLN) and FDI inflow shows that trade surpluses indicate strong economy, which encourages further inflow of FDI.

The third parameter is inflation rate which expresses the overall fiscal performance of the host country and the effectiveness of the services sector (IT enabled services here) high inflation indicates inability and failure of the RBI, the central bank, to conduct proper monetary policy.

The following economic model has been used in the present study for studying the impact of German FDI vis-à-vis its impact on the IT sector in particular and the Indian economy in general.

$$\text{German FDI} = X_0 + X_1 \text{MRKS} + X_2 \text{INFLT} + X_3 \text{TRDBL} + X_4 \text{SRVCS} + \text{Error}$$

X_0 = Constant

X_1, X_2, X_3, X_4 = are the coefficient

E = Error term

One of the major characteristics and feature that have come into light that German investors have shown special interest in Technical Collaborations which are usually available in bigger states and their metropolitan cities. We have discussed this aspect at length in Chapter IV sighting reasons behind this trend among German investors. This inclination has been noticed more towards metropolitan and some big cities probably because of more ground hassles and inflexible labour laws, poor infrastructure, relatively high taxes, low availability of technical staff etc. To be more specific if we talk about IT sector in addition to India's poor performance in terms of competitiveness, quality of infrastructure and certain procedural constraints, conservative attitude towards outsourcing kept German investors away from

investment in the Indian IT sector. Whatever investments were coming from Germany in IT sector were sector specific and concentrated in bigger states and cities like Maharashtra, Delhi, Karnataka etc.

Microeconomic determinants such as the rate of return on investment, market growth and availability of skills and manpower do not seem to pose immediate risks to investors. In most sectors, market penetration is still low and, therefore, profit margins are not expected to narrow soon. The favorable outlook for growth and the abundant supply of skilled labour has been discussed at length in Chapter IV. Regarding the stability of the exchange rate, the Reserve Bank of India has been able to maintain currency stability, even in recent periods of regional or global turmoil.

Through the analysis and data one could evidence the concept and material significance of FDI to the Indian economy and recognize Germany as of the major source of FDI and trade to India. The sectoral and Regional analysis reveals that FDI inflows from in India has been gradual but has not been upto the potential of the Indian market and German Investors. Although Germany has been the oldest and prominent trade partner for India from the European Union but when it came to Investments in the Indian IT sector German companies were shy probably because of strong labour-union, quality-driven market and an overall conservative attitude towards outsourcing. At first German investors turned to India IT sector simply because of cheap labour and still German companies were comparatively reluctant on the bandwagon. But now the whole scenario has changes during last five years. Now with the Indian IT industry posting a growth rate of such as 32% in 2006-2007 India has become serious global contender and a highly reliable quality provider. Seeing the rift of global giants towards Indian IT & IT-enabled market German companies want to be in action. So with the aim to reap advantage and earn profits German push into the IT field was backed by long-term trade relations and open channels of communications.

The FDI from Germany shows mixed trends, the curve went up in the 90's, till 1997, than there was a slackening in 1998. Germany, which used to be the premier European investor in India, has been overtaken and relegated to the third place by UK

and the Netherlands. The end-2007 figure is not impressive, with the country down to No. 7 position in terms of volume, which is not very satisfying. A Deutsche Bank report published late in the year 2007 got attention in India for suggesting a slowdown since the year 2000 in German FDI entering India, with UK and Dutch firms outpacing German firms, despite the good performance of German enterprises in India, having recorded double-digit growth in sales and net income. The FDI inflow from Germany in India has been gradual but has not been the main destination of German investors. The low figure of FDI inflows to India from Germany if compared with other developing nations speaks the volume that how conservative the German investors have been when it comes to IT sector owing to several factors that make India a far less attractive ground for direct investment than its potential.

Taking into consideration of the fact that India has a huge and fast growing domestic market there is every reason to believe that continued reforms, economic policies, and institutional reforms a better environment can be created that would be conducive for private investment and economic growth and substantially large volumes of FDI will flow to India. India has now become a hot spot FDI destination especially when it comes to IT and IT enabled services, as Germany is to automobile India is to Information Technology but German investors have shown special interest in Technical collaborations which are usually available in big and metropolitan cities as smaller states have more ground hassles and inflexible labour laws and relatively high taxes and poor infrastructure.

A McKinsey survey of 2006-07 incidentally verifies the finding of our study as analysed and mentioned in the preceding chapters. Although, the MGI research shows that regardless of the policy regime, the industry, or the procedural constraints, FDI can benefit a developing nation like India immensely. However, to make the most out of mutual trade business, it is emphasized that the government and the appropriate agencies must strengthen the foundations of their economies, including taking care of the above mentioned obstacles namely that of the infrastructural problems, the legal and regulatory environment, and the procedural matters. Taking into consideration of the fact that India has a huge and fast growing domestic market there is every reason to believe that continued reforms, economic policies, and institutional reforms a better

environment can be created that would be conducive for private investment and economic growth and substantially large volumes of FDI will flow to India. There are still some trade obstacles in the process of German FDI to India in particular and global FDI in general. The FDI regime in India is still quite restrictive. Foreign ownership of between 51 and 100 percent of equity still requires a long procedure of governmental approval. In our view, there does not seem to be any justification for continuing with this rule. This rule should be scrapped in favor of automatic approval for 100-percent foreign ownership except on a small list of sectors that may continue to require government authorization. The banking sector, for example, would be an area where India would like to negotiate reciprocal investment rights. Besides, the government also needs to ease the restrictions on FDI outflows by non-financial Indian enterprises so as to allow these enterprises to enter into joint ventures and FDI arrangements in other countries. Further deregulation of FDI in industry and simplification of FDI procedures in infrastructure is called for.

India is now the hotspot for investment as 70% of foreign investors are making profits from their India operations and 83% are considering expansion of business. Most of the investors including Germany find the Indian market as a high growth market and express confidence that the 8% GDP growth would be surpassed in 2006-7 as well. This prognosis is revealed by FICCI's annual Foreign Direct Investment (FDI) Survey 2006. The trend now is gradually turning around into a favourable matrix for those who are willing to brave the apparent risks and constraints in anticipation of gainful returns. In the Indian economy states have been showing considerable interest in attracting foreign investments. A healthy competition has emerged among states to attract investment in their respective states enhanced by technological advancements. The Mumbai Regional Office of RBI registered maximum inflows of about 29% of the total inflows received during 2006-07. New Delhi, Chennai, Bangalore and Hyderabad are the other major RBI's Regions which have received FDI inflows during the same period. With the Indian IT industry posting growth rate of such as 32% in 2006-07 IT field has become a large point of interest and it is a perfect time for German investors to try their proves in the Indian IT sector. Still it is not too late for German investors there exist opportunities in the

enterprise application integration and other tested fields of IT and IT-enabled services where some of the world biggest players are operating successfully in areas like: Call Centres, Business Process Outsourcing, System Integration, Enterprise Solutions, E-Commerce Solutions, Communication and Media, Artificial Intelligence, Packages Software Solutions etc.

The MGI research found that the foreign companies usually deploy joint ventures as a pretext to out into the local set-up of the host economy and to overcome several local constraints such as pressure politics, cultural alienation etc. And eventually make use of joint-ventures to expand their operations locally. Hence, We also recommend that to get the most from FDI, a developing nation like India should abandon its incentives and regulations and concentrate on strengthening economic foundation in particular, stabilizing the economy and promoting competitive markets. Macroeconomic instability discourages long term investment by making demand, prices, and interest rates difficult to forecast. Hence competition is essential to diffuse the impact of FDI, for without competitive markets, the entry of foreign players has little effect on inefficient domestic incumbents and their productivity. To promote competitive markets, developing nations must reduce restrictions on foreign investment, lower import tariffs, streamline the requirements for starting new business, and encourage new market entrants. Finally, developing countries like India must continue to build a strong infrastructure, including roads, power supplies, and ports. In India, for example, the continuing liberalization of the power and telecom sectors, a process that began in 1991, triggered off an investment boom, which led to the upgrading of the infrastructure. That, in turn, became an important prerequisite for the development of the IT-and business-process-outsourcing industry. Hence, rather than holding FDI at arm's length, developing nations must embrace it.

Despite long history, the Indo-German trade relationship today has much room for improvement, particularly regarding investment flows. The cumulative FDI equity inflows in India during the period August 1991 to March 2007 stood at US\$ 54,628 million and Germany accounted to (1,656) only. From Indian perspective, Germany has been an important source of FDI and enjoys position as one of the most prominent foreign investor in India. In 1990s Germany ranked first among European investors in

India, and fourth overall behind Mauritius, the US and Japan. Given the trends of globalization and liberalization, the openness of Indian economy the bilateral trade between Indian and Germany is expected to grow for a few simple reasons like India offers a huge potential for foreign trade and investments. India's large growing market, strong micro economic structure, high skilled workers and the potential it offers foreign firms for cost reduction appears a great match for German companies increasing outward orientation. But less than one percent of Germany's foreign trade is exchanged with India and India accumulates less than one percent of our investment. However those German companies which invested in India showed a profitable growth. This means for India there is a huge untapped potential and the prospects for increasing bilateral trade between India and Germany appears to be promising.

Although the realization rate has improved remarkably as compared to the earlier, it still remains a matter of concern and despite of certain bottlenecks in the procedures, policies and infrastructure more and more investments from Germany are coming in through the automatic route (the Reserve Bank of India, not requiring government approval). The Indian Software industry has brought about a tremendous success for the emerging economy and has grown from a mere US \$150 million in 1991-92 to US \$5.7 billion in 1999-2000. The Indian information technology industry passed \$ 50 billion mark in 2006-07. Today, the software industry in India exports software services to nearly 95 countries around the world and is expected to generate total employment of around 4 million people, which accounts for 7% of India's total GDP, in the year 2008. Most of the problems faced by the investors arise because of domestic policy, rules & procedures and not the FDI policy & procedures e.g Lack of clear cut and transparent sectoral policies for FDI. FDI investors who are coming into India for the 1st time faces certain hurdles at different levels like laws, regulatory system and Government monopolies. All these restrictive policies discourage entry and exit and performance of foreign investors. Weak credibility of regulatory system and multiple and conflicting roles of agencies and government has an adverse impact on new FDI investors, which is greater than on domestic investors. According to some consultants and experts, in banking sector, controls on activity dampen FDI inflow.

The absence of product patents in the chemical sector has reduced inflows into drugs and pharmaceuticals sectors.

As markets open up more big companies are bound to come. Along with SAP and Siemens, the other main German investors in India are DaimlerChrysler, Bayer, BASF, Robert Bosch, Allianz and ThyssenKrupp. Approximately eighty percent of all German investors present in India are big manufacturing firms, mostly in the fields of electrical, IT and electronic engineering, chemical and mechanical engineering and automobile components. According to the Deutsche Bank Research report, with more and more small and medium-sized German companies showing interest, during the year 2006-07, about seventy small and medium-sized German companies visited India to explore the potential for collaboration. Recent surveys reveal the enthusiasm among German investors in India.

According to Deutsche Bank Research approximately 80% of the German companies in India are from the manufacturing sector mostly in the fields of electric & electronical and mechanical engineering including auto components. Five major sectors that have attracted highest FDI into India during the year 2006-07 are services, electrical equipments (including computer software & electronics), telecommunication, construction and real estate activities. In addition to India's poor performance in terms of competitiveness, quality of infrastructure and certain procedural constraints there are several other factors that make India a far less attractive ground for direct investment than its potential. Future profit expectation is the basic and fundamental reason for all the foreign as well as domestic investments. The economy only gets benefited if the economy policy fosters competition, creates a well functioning modern regulatory system and discourages artificial monopolies by the government through entry barriers. A recognition and understanding of these facts can result in a more positive attitude towards FDI.

State-wise approvals of FDI in India suggest differing performances among Indian states. States are now in competition with one another to attract private investment, both domestic and foreign. From the long-term development point of

view, we are of the view that India has tremendous growth prospects through export-led growth and that export-led growth involves a broad range of sectors, both traditional and new. The most interesting by far of the new sectors is software and information technology. India is becoming one of the most important players of the world in this sector and it is the fastest growing foreign exchange earner for India. Export-led growth in services is one of the most interesting developments, and export-led growth in manufactures, the more traditional textiles and apparel, in electronics and other labor-intensive operations remains an area where India could do a lot more than in the past.

There are rather significant differences in reform interest and economic performance between a large part of northern India and southern India where Karnataka, Tamil Nadu and Andhra Pradesh are quite dynamic now in trying to get the infrastructure, and the policy regime right to attract large-scale foreign investment. In the north, in Bihar, Uttar Pradesh one does not see the same kind of reform dynamism and the results are therefore poor in terms of economic growth. These differences will be noticed politically sooner rather than later, (as inequalities will become glaring) and the states that are ahead will be rewarded with better performance and the states that are behind will find that there is the demand to catch up with the states that are growing. That will spur a kind of competition among the Indian states and make the reform process go much faster. States that are ahead in the reform efforts right now are going to find that if they move against the populist policies and set up regular markets for services, such as power and water then they are going to be ahead of the rest in the game

India is a multicultural society and a large number of multinational companies do not understand the diversity and nature of different layers of the society. Though economic reforms introduced the Foreign Direct Investment (FDI) in the country since nineties, but it does not seem so far to be really evident in our overall attitude. Foreign investors have persistent perception that they are still looked at with suspicion. Besides some of the unfortunate incidents of the past have adversely affected the business environment in India. Our promotional effort is quite often of a general nature and not corporate specific. In spite of several surveys indicating India as the

most promising and profitable destination, in several cases the foreign investors are discouraged even before they consider an investment prospect. Multiple approvals, excessive time taken and long lead times of up to six months for licenses for duty free exports lead to loss of investors' confidence despite of a considerable promising market size.

Poor infrastructure is found to be the most important constraint affecting the productivity of the economy as a whole and hence its GDP/per capita GDP. The state of infrastructure is deplorable. Low proper transportation, communication, security, Warehousing, power, water insurance or banking aids to manufacturing and trade processes in India leaves much to be desired in order to realize the full potential of any business process. 54% of the respondents of the FICCI Survey 2007 have rated the condition of India's roads and highways as below standard while 42% of the participating companies have rated the quality of India's power, port and airports amenities as sub-standard. It also reduces the comparative advantage of industries that are more intensive in the use of such infrastructure e.g. engineering and construction industries. Inadequate and poor quality infrastructure raise export cost vis-à-vis global competitors having better quality and lower cost infrastructure. As a foreign direct investor planning to set up an export base in developing economies has the option of choosing between India and other locations with better infrastructure, India is handicapped in attracting export oriented FDI. Other than Inadequate and poor quality and roads , rail roads and ports certain unclear laws, rules, regulations relating to infrastructure adds more to the Indian misery.

Reform of India's financial sector is crucial for large FDI flows into India but so far only some partial steps have been undertaken and these are by no means going to make any meaningful changes to the existing system. India's banking and insurance companies were nationalized more than two decades ago. While a number of countries had undertaken such actions in the late 1970s and early 1980s however, they have almost completely reversed their policy by now. India still continues to rely on a state-owned, state-run banking system and the insurance sector till very recently remained a government monopoly. This as one would expect has had highly adverse results, both

in terms of availability of funds for investment and a negligible presence of foreign banks and no presence of foreign insurance companies in the country

Taking into account the factors which investors consider key for their investment decision, the prospects for FDI in India are good. While India has had a history of frequent leadership changes in the past (mostly in the 1990s), the mindset to usher in further reforms cuts across parties and the process of liberalization - despite occasional setbacks - seems irreversible. At the same-time might take several years before large investment flows enter the country, as many investors still see India as an attractive location in the medium to long term but less so in the short run. Nearly 40% of roughly 20,000 German firms surveyed by Deutsche Industries- and Handelskammertag (DIHK) expressed their concrete plans to tap new markets abroad. Of those who plan to increase their investments abroad, many are considering transferring capital and knowledge-intensive functions abroad such as administration and R&D. This bodes well for India's large knowledge-based sector where high skills are complemented by cost benefits. The findings are generally in line with the perception of foreign companies already operating in the country.

To sum up German FDI inflows to India in IT sector was not to the potential of the Indian market and has mainly concentrated to certain special sectors and particular regions. German investors have shown special interest in Technical Collaborations which are usually available in bigger states and their metropolitan cities. India must continue to build a strong infrastructure, including roads, power supplies, and ports. In India, for example, the continuing liberalization of the power and telecom sectors and IT sector has triggered off an investment boom. That will in turn, become an important prerequisite for the development of the IT-and business-process-outsourcing industry. Hence, rather than holding FDI at arm's length, developing nations must embrace it.

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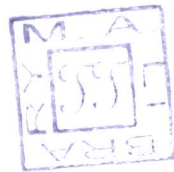
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*Dedicated
To
My Parents*





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Chairman

Certificate

This is to certify that the thesis entitled “**A Study of Foreign Direct Investment (FDI) Flows from Germany to India with reference to Information Technology (IT) Sector**” embodies the empirical investigation carried out by **Miss Subia Khan** for the degree of Doctor of Philosophy in Commerce under my supervision. The thesis is fit for submission to the examiners for evaluation.

(Prof. Badar Alam Iqbal)
Supervisor

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Subia Khan
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Chapter-1

Introduction

FDI-IMPORTANCE

All over the world, FDI is seen as an important source of non-debt inflows, and is increasingly being sought as a vehicle for technology flows and all-round development of a nation. Developing countries like India have scarce capital resources, lack technical, managerial and marketing skills for export manufacture and are thus unable to step up exports over a short period of time to earn much needed foreign exchange. FDI helps in removing procedural impediments and curbing Balance of payment on positive nodes through inflow of investment and outflow of investment income (the capital account and investment income in invisible account respectively). It acts as an alternative to external assistance and helps in generating employment, earning foreign exchange and stimulating capital inflow that promotes efficiency and greater inflow of technology.

If directed properly to particular uses and sourced from particular sources with greater emphasis on acquiring infrastructure and technology and developing indigenous R&D gains due to FDI stimulates income and employment, technology and capital and makes local companies and manufacturers competitive and stronger.

German FDI importance to India

The economic relations between India and Germany were established long back in early 16th century when a well-known German trading companies from Augsburg and Nuremburg built ships in Lisbon and, with the help of the

Portuguese, developed a new Indo-German trade route around Africa. From Indian perspective, Germany has been an important source of FDI and enjoys position as one of the most prominent foreign investor in India. In 1990s Germany ranked first among European investors in India, and fourth overall behind Mauritius, the US and Japan. German investment in India almost tripled in the first few years of economic reform in 1991. But the volume of German investments remain stagnant in the late 90s and even started decreasing after the year 2000. Though in 2003, Germany was India's fifth largest supplier, providing 4% of Indian imports and the fifth largest buyer absorbing 4% of Indian exports. Among Germany's trading partners, India has 36th position in a world-wide ranking of suppliers and ranked 41 among buyers. However, Indo-German trade relations picked up considerably in 2004. Indo-German trade reached EUR 6.2bn in the year 2004, recording the highest annual growth rate in over two decades.

The FDI from Germany shows mixed trends, the curve went up in the 90's, till 1997, than there was a slackening in 1998. Germany, which used to be the premier European investor in India, has been overtaken and relegated to the third place by UK and the Netherlands. The end-2007 figure is not impressive, with the country down to No. 7 position in terms of volume, which is not very satisfying. A Deutsche Bank report published late last year got attention in India for suggesting a slowdown since the year 2000 in German FDI entering India, with UK and Dutch firms outpacing German firms, despite

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the good performance of German enterprises in India, having recorded double-digit growth in sales and net income

As markets open up more big companies are bound to come. Along with SAP and Siemens, the other main German investors in India are DaimlerChrysler, Bayer, BASF, Robert Bosch, Allianz and ThyssenKrupp. Approximately eighty percent of all German investors present in India are big manufacturing firms, mostly in the fields of electrical, IT and electronic engineering, chemical and mechanical engineering and automobile components. According to the Deutsche Bank Research report, with more and more small and medium-sized German companies showing interest, during the year 2006-07, about seventy small and medium-sized German companies visited India to explore the potential for collaboration. Recent surveys reveal the enthusiasm among German investors in India.

Despite this long history, the Indo-German trade relationship today has much room for improvement, particularly regarding investment flows. The cumulative FDI equity inflows in India during the period August 1991 to March 2007 stood at US\$ 54,628 million and Germany accounted to (1,656) only. The top ten investing countries with respect to FDI equity inflows are Mauritius, USA, UK, Netherlands, Japan, Singapore, Germany, France, South Korea, and Switzerland. Given the trends of globalization and liberalization, the openness of Indian economy the bilateral trade between Indian and Germany is expected to grow for a few simple reasons like India offers a huge

potential for foreign trade and investments. India's large growing market, strong micro economic structure, high skilled workers and the potential it offers foreign firms for cost reduction appears a great match for German companies increasing outward orientation. But less than one percent of Germany's foreign trade is exchanged with India and India accumulates less than one percent of our investment. However those German companies which invested in India showed a profitable growth. This means for India there is a huge untapped potential and the prospects for increasing bilateral trade between India and Germany appears to be promising.

As one of our largest trading partners in Europe we greatly value our relationship with Germany. Our bilateral trade has been growing at 20% on average over the last years. Big German companies already have a presence in India. What we need to do now, is to have a greater engagement with small scale and mid-sized companies, sometimes are not very aware of the opportunities of the Indian market. Second thing we need to extend our trade basket. Contents of our bilateral trade basket must have more mass and more diversity in it.

REVIEW OF LITERATURE

A number of articles and write-ups have been published in financial dailies, periodicals and a few in the professional and research journals on Foreign Direct Investment (FDI). These articles are written by professional academicians and journalists explaining the different types of FDI and their role in Indian economy as well as the various trends of FDI in India. A few articles appeared in various papers and periodicals. Beside all these the text books written by different authors have been consulted. Some of the articles have been reviewed in the following paragraphs.

S. Majumder, Senior Researcher with a Japanese MNC in New Delhi, in his article entitled “Why FDI Caps must go”, says that the Government wants the private sector to invest in telecommunication, insurance, finance, banking, retail trade and real estate. But the Indian investors may not have the financial strength to make the large investments these sectors demand. Which is why India needs FDI. He further says that the US President, Mr. George Bush, urged India to lift the cap on foreign investments, make rules transparent, continue reducing its tariffs and open the market for American agricultural products. This is the way to go.¹

R.Vidyanathan, Professor of Finance, Indian Institute of Management-Bangalore, in his article entitled, “FDI may be Harmful to Economic Growth”, has observed that the Foreign Direct Investment (FDI) mantra is considered an

¹ S. Majumder, “Why FDI Caps must go”, Business Line, Financial Daily- The Hindu Group of Publications. Tuesday 31st January 2006.

all-purpose panacea for the ills of Indian economy and society. Unfortunately, there has not been much debate about the far-reaching implications of FDI in our economy and, particularly, how it can stifle economic growth.²

Chaze Aaron, in his article titled, **“FDI Inflows hit Record Levels”**, opines that the Indian government has been quietly liberalizing foreign direct investment rules to the point that most of the restrictions covering even tightly regulated industries have been lifted. The results are beginning to show. The need for pre-approvals by the Foreign Investment Promotion Board (FIPB) in a number of industries has been eliminated, and that, too, has begun to have an impact. He also says that while FDI flows are growing sharply, the numbers pale by comparison with mergers and acquisitions values involving Indian companies since the start of the year.³

M.Y. Khan, former Economic Adviser to SEBI, in his article entitled, **“Structural Transformation in Capital Flows”**, says that following the liberalization of external financial transactions and structural adjustment in the economy, there has been a policy push towards encouraging Foreign Direct Investment (FDI) and portfolio investment as FDI does not result in long-term debt servicing burden. As the economy is performing well, the Government may consider a further dose of financial liberalization. With the trend towards non-debt creating capital, the Government should encourage inflow through FDI by opening up the retail, transport, power generation and other

² R.Vidyanathan, “FDI may be Harmful to Economic Growth”, Business Line, Financial Daily- The Hindu Group of Publications. Thursday 9th February 2006.

³ Chaze Aaron, “FDI Inflows hit Record Levels”, Global Finance, April 2006.

infrastructure sectors such as warehousing and cold storage facilities. Project proposals involving FDI should be cleared on a fast-track basis, eliminating in the process all the bottlenecks. Also, the policy on the FDI should be such that it helps generate employment as well.⁴

S.D. Naik, in his article entitled **“Opportune Time to Think Big”**, has visualized that considering the opportunities have opened up in the textile and clothing industry, this is the opportune time to think big both for the policy-makers and the industry leaders. In view of the great employment potential of this industry, India would do well to view China as a benchmark while formulating its strategy for the textile sector rather than being satisfied with the progress achieved over the last two-three years. The Government should facilitate large-scale FDI in the sector to bring not only capital but also the product and business process know-how.⁵

In report captioned, **“India needs to work on FDI, copyright norms: Lavin”**, appeared in **“The Financial Express”**, the US under secretary of commerce for international trade, Franklin L Lavin said that India needs to further liberalise its foreign direct investment (FDI) norms and address issues related to intellectual property rights for attracting American investments. Mr Lavin also said that India needs to lower agricultural tariffs, have a vibrant IPR

⁴ M.Y. Khan, “Structural Transformation in Capital Flows”, Business Line, Financial Daily- The Hindu Group of Publications. Saturday 8th April 2006.

⁵ S.D. Naik, “Opportune Time to Think Big”, Business Line, Financial Daily- The Hindu Group of Publications. Wednesday 12th April 2006.

regime and open up its retail sector to foreign investment to further improve bilateral relations between the two economies.⁶

S. Majumder, in his article entitled, “**Foreign Trade Policy needs FDI Flavour**”, has observed that the reason for China being able to attract foreign investors to accelerate its export, while India has failed is that in India, FDI was never thought of as giving export an edge. The FTP was never made FDI-friendly. It did not offer any special incentive to foreign investments in export-oriented industries. It merely provided some duty exemption schemes, subject to export obligations. He further says that it is time for the Foreign Trade Policy to adopt a new strategy in the wake of a dramatic change in the global trade pattern. The decade-old-area-and product-specific trade matrix needs a re-look.⁷

H Saranga, in his work, “**Multiple Objective Data Envelopment Analysis as Applied to the Indian Pharmaceutical Industry**”, observed that the change of Intellectual Property Protection (IPP) from a softer *process patenting* to a stronger *product patenting* in Indian Pharmaceutical Industry (IPI) is attracting many global drug majors to source their production from India, which is the fourth largest producer of pharmaceuticals in the world. He studies how various firms in the IPI with different business strategies, competing for the same opportunities can find suitable benchmarking peer groups to meet the challenges of a dynamic business environment using data envelopment analysis

⁶ “India needs to work on FDI, copyright norms: Lavin”, “The Financial Express”, 4th May 2006.

⁷ S. Majumder, “Foreign Trade Policy needs FDI Flavour”, Business Line, Financial Daily- The Hindu Group of Publications. Friday 5th May 2006.

(DEA). The proposed model has the flexibility to include inputs like R&D expenditure and outputs like Exports that are not homogeneously distributed across the firms and address the interests of various stake holders like buyers and vendors simultaneously.⁸

Y Wei and X Liu, in their joint work, **“Productivity Spillovers from R&D, Export and FDI in China’s Manufacturing Sector”**, assesses productivity spillovers from R&D, exports and the very presence of foreign direct investment (FDI) in China's manufacturing sector. They concluded that there are positive inter-industry productivity spillovers from R&D and exports, and positive intra- and inter-industry productivity spillovers from foreign presence to indigenous Chinese firms within regions. OECD-invested firms seem to play a much greater role in inter-industry spillovers than overseas Chinese firms from Hong Kong, Macao and Taiwan within regions. The findings have important managerial and policy implications.⁹

Chaze Aaron, in his article titled, **“A Dose of Liberalization and Economic Enthusiasm Sweeps India”**, states that the Indian government is moving to liberalize rules that govern foreign investment in India. The government intends to ease regulations that compel a foreign company with a joint venture in India to seek the federal government's permission to set up a similar business in the country. This regulation has been a stumbling block to foreign

⁸ H Saranga, “Multiple Objective Data Envelopment Analysis as Applied to the Indian Pharmaceutical Industry”, *Journal of the Operational Research Society*, 13th September 2006.

⁹ Y Wei and X Liu, “Productivity Spillovers from R&D, Export and FDI in China’s Manufacturing Sector”, *Journal of International Business Studies* (2006).

investment, and the move represents a significant change in the government's approach.¹⁰

Ramkishan S. Rajan, Professor at Lee Kuan Yew School of Public Policy, National University of Singapore, in his article entitled, **“Foreign Direct Investment and the Internationalization of Production in the Asia-Pacific Region: Issues and Policy conundrums”**, says that the current global environment is characterized by an intense “global race” for FDI. No doubt, FDI is drawn to different countries for different reasons. Nonetheless, at a general level, in order for a country to be more attractive to investors (both local and foreign) there is a need to put in place measures to ensure the existence of an enabling environment. FDI policy intervention ought not to be sectorally biased. Instead, intervention ought to focus on improving the host country’s general capability to benefit from FDI by improving the quality of the labour force and infrastructure in a country, develop local skills, technology and local learning, and ensure a stable and conducive overall macroeconomic and regulatory environment.¹¹

Sandeep Kapur, in his article titled, **“FDI in India: Recent Trends and Prospects”** , places recent trends in FDI inflows and policy changes in a historical context, and assesses the role that foreign capital can play in continuing economic growth. The economic reforms of 1991 opened the Indian economy for foreign players. For FDIs, India has now become a hot destination

¹⁰ Chaze Aaron, “A Dose of Liberalization and Economic Enthusiasm Sweeps India”, Global Finance, Feb 2005.

¹¹ Ramkishan S. Rajan, “Foreign Direct Investment and the Internationalization of Production in the Asia-Pacific Region: Issues and Policy conundrums”, Asia-Pacific Trade and Investment Review, 1st April 2005.

because of its vast potential. The Indian investment setting is constantly changing and the country has become the third most preferred destination for investors after china and the US.¹²

P.V Sharma, in his article titled, **“FDI in India and China”**, presents an assessment on the FDI flow to China and India. Asian countries, especially China and India have a commanding lead in attracting more FDIs compared to other Latin American countries. There is a continuous reduction in the gap between the FDI flow in developer and developing countries globally. Compared to India, China is having an edge over India in attracting more FDI. A study report by UNCTAD expects a rise in the FDI flow to India if the government continues with the economic reforms with a commitment to attract more FDI.¹³

Sumit K.Majumdar, Professor of Technology Strategy at the University of Texas at Dallas, in his article titled, **“FDI Needs Micro-Macro Reforms”**, opines that Foreign Direct Investment enters a country only if it is competitive so that foreign firms can benefit from its presence. On the other hand, FDI is also expected to enhance a country’s competitiveness. Reforms of grassroots bureaucratic processes is one of the most important steps to be taken to make

¹² Sandeep Kapur, “FDI in India: Recent Trends and Prospects”, Treasury Management, The ICFAI University Press, August 2005.

¹³ P.V Sharma, “FDI in India and China”, Treasury Management, The ICFAI University Press, August 2005.

India competitive. If these micro-macro reforms are not put in place, India's ability to attract FDI will remain as limited as it is today.¹⁴

K. Seethapathi and Arindam Banerjee, in their article titled, **"The Other Side of FDI"**, tries to explore the other side of the FDI in an economy. Of late, majority of the economies all over the world have opened their door to Foreign Direct Investment (FDI). The FDI extends a number of benefits to the host countries in terms of economic development, employment generation and technology transfers. At the same time there are some negative sides to the FDI flow like increased level of competition in the economy and concentration of investment in selected sectors to mention a few.¹⁵

A. Srujan, in his article titled, **"Emerging Trends in FDI: Empirical Evidence"**, makes an attempt to study the Global, Regional and Country trends in FDI. Foreign Direct Investment (FDI) has evolved as a vital resource for the economic development of different countries. Though the future trend of inward and outward FDI flows seems to be positive, a lot depends on the factors like global economic trends, liberalization activities and stock market cycles within the different regions and countries.¹⁶

Pramod Kumar, in his article titled, **"Role of FDI in the Economic Development of Developing Economies"**, elaborates the role FDI plays in the economic development of the developing economies. In recent times, the

¹⁴ Sumit K.Majumdar, "FDI Needs Micro-Macro Reforms", Financial Daily- The Hindu Group of Publications, 2nd August 2005.

¹⁵ K. Seethapathi and Arindam Banerjee, "The Other Side of FDI", Treasury Management, The ICFAI University Press, August 2005.

¹⁶ A. Srujan, "Emerging Trends in FDI: Empirical Evidence", Treasury Management, The ICFAI University Press, August 2005.

Foreign Direct Investment (FDI) has become a main source of foreign capital for developing economies and the inflow is showing an increasing trend. The increasing role is due to the fact that it brings in the most modern technology, capital skilled labor, etc. considering this, most of the developing economies are providing excellent investment climate towards foreign capital.¹⁷

K.P. Unnikrishnan, in his article titled, **“FDI in Service Sector: Pathway to Economic Growth”**, gives a note on the importance of FDI in service sector and how it benefits the host country’s economy. The article states that with the increased share of service sector in the entire global FDI stock, developed and developing countries are competing to attract Foreign Direct Investment (FDI) in services. The advancement in the information and communication technologies has added magnetism to the tradability of services across the border.¹⁸

Florian A A Becker-Ritterspach, in his work, **“Transfer, Intercultural Friction and Hybridization: Empirical Evidence from a German Automobile Subsidiary in India”**, focuses on the transfer of shop-floor-related work concepts and work roles within the intercultural context of a German automobile multinational in India. He combines a micro-macro-level analysis and shows that an institutional perspective is instrumental to

¹⁷ Pramod Kumar, “Role of FDI in the Economic Development of Developing Economies”, Treasury Management, The ICFAI University Press, August 2005.

¹⁸ K.P. Unnikrishnan, “FDI in Service Sector: Pathway to Economic Growth”, Treasury Management, The ICFAI University Press, August 2005.

understanding the transfer, intercultural friction and organizational hybridization on the micro-level.¹⁹

Paul M Vaaler, Burkhard N Schrage and Steven A Block, in their joint work, **“Counting the investor vote: political business cycle effects on sovereign bond spreads in developing countries”**, writes “International business research has paid scant attention to whether and how electoral politics and economic policies affect foreign investment risk assessment, particularly in developing countries, where the last decade has seen both considerable foreign investment and domestic progress toward democratization and electoral competitiveness. We respond with development and testing of a framework using partisan and opportunistic political business cycle (PBC) theory to predict the investment risk perceived by investors holding sovereign bonds during 19 presidential elections in 12 developing countries from 1994 to 2000. Consistent with our framework, we find that bondholders perceive higher (lower) investment risk in the form of higher (lower) credit spreads on their sovereign bonds as right-wing (left-wing) political incumbents appear more likely to be replaced by left-wing (right-wing) challengers. For international business research, our findings illustrate the promise of PBC theory in explaining the election-period behavior of sovereign bondholders and, perhaps, other investors who also ‘vote’ in developing country elections and can substantially influence the price and availability of capital there. For developing country investors and states, our findings highlight the financial

¹⁹ Florian A A Becker-Ritterspach, “Transfer, Intercultural Friction and Hybridization: Empirical Evidence from a German Automobile Subsidiary in India”, *Asian Business & Management* (2005).

effects of democracy in action, and underscore the importance of state communication with investors during election periods.”²⁰

Nirupam Bajpai and Nandita Das Gupta, in their joint article entitled, **“FDI to China and India: The Definitional Differences”**, says that India’s FDI figures are underestimated because of the exclusion of certain components that are included by other countries, which go by IMF’s definition. There are striking elements of non-conformance between the IMF definition of FDI and that used by the RBI for computational purposes. Indian FDI statistic appears to be limited because it includes only one component- foreign equity. An especially important component of FDI that is excluded in India constitutes the reinvested earnings. China contrary to India, adheres to the IMF standards of FDI computing and includes all the components of IMF in its definition of FDI. But indiscriminate, across-the-board alignment with the IMF definition is not meaningful either, though the Indian FDI statistic looks small compared to China’s. India needs to update the FDI definition in certain aspects but not in all, even if what understates inflows.²¹

Platt Gordon, in his article titled, **“United States: US Remains a Prime Beneficiary of Foreign Direct Investment”**, says that “To listen to some politicians on the US campaign trail, the United States will soon have no employment opportunities left as its companies shut down factories and move to lower-cost countries of Asia, taking American jobs with them. It seems they

²⁰ Paul M Vaaler, Burkhard N Schrage and Steven A Block, “Counting the investor vote: political business cycle effects on sovereign bond spreads in developing countries”, *Journal of International Business Studies* (2005).

²¹ Nirupam Bajpai and Nandita Das Gupta, “FDI to China and India: The Definitional Differences”, *Financial Daily*, The Hindu Group of Publications, 15th May 2004.

might be missing the point: Certainly some companies are shipping jobs overseas, but the reverse flow of jobs to the US as a result of foreign investment is even greater, analysts say.”²²

Hans Christiansen and Ayse Bertrand, in their joint work entitled, “**Trends and Recent Development in Foreign Direct Investment**”, write that Foreign Direct Investment (FDI) in the OECD continued to fall in 2003. One reason for this appears to be the sluggish macroeconomic performance of many of the larger OECD economies, not least in Europe. This would appear to have depressed outward as well as inward investment. Another reason for the limited FDI activity is that several sectors that saw rampant cross-border investment in the late 1990s and 2000 have entered into a phase of consolidation. Enterprises tend to be disinclined to embark on new purchases while still in the process of integrating foreign acquisitions of recent years into their corporate strategies.²³

Tamanna Kumar, in her article entitled, “**India’s Telecoms Landscape Set to Change**”, opines that the telecoms executives' long-pending desire for India's foreign direct investment (FDI) limit to be raised will soon be fulfilled. Investment firms see the move as a clear signal that the new government isn't going to back away from the reform process, and they are now abuzz with talk of a surge in M&A activity, which has been picking up since the beginning of the year. She also says that an estimated \$10 billion in investments is required in the telecoms sector over the next three years to keep pace with skyrocketing

²² Platt Gordon, “United States: US Remains a Prime Beneficiary of Foreign Direct Investment”, *Global Finance*, June 2004.

²³ Hans Christiansen and Ayse Bertrand, “Trends and Recent Development in Foreign Direct Investment”, *OECD* June 2004.

demand. Since sufficient funds don't exist in the domestic market, operators have found it increasingly difficult to meet their financing requirements.²⁴

Nitya Nanda, in her article entitled, **“Push Hard for Quality FDI”**, said that merely receiving more FDI is no panacea for developing countries problems. The challenge before India is to get quality FDI that fosters development. As it is, getting FDI is quite difficult, but making it development-friendly is even more so. Determining FDI is a complex process. For example, while India may seem more attractive than China on most of the counts, it attracts less than one-tenth the FDI into the latter. Nevertheless, the Steering Group at the Planning Commission thought that the country needed to liberalise further. But one forgets that China receives huge FDI not because it allows unrestricted entry but because its approval process is fast and efficient. Unlike India, project status is known within couple of months. Large FDI flows is the effect of high growth and not the other way round.²⁵

An article captioned, **“India to Raise Amount of Foreign Investment Allowed in Domestic Airlines”**, appeared in **Airline Industry Information**, states that India's Union Cabinet has approved a proposal to allow the amount of Foreign Direct Investment (FDI) in Indian domestic airlines to rise from 40% to 49%. The move has been heralded as a major step towards boosting the Indian aviation sector which is seen as an untapped market due to the

²⁴ Tamanna Kumar, “India’s Telecoms Landscape Set to Change”, Telecom Asia, August 2004.

²⁵ Nitya Nanda, “Push Hard for Quality FDI”, Financial Daily, The Hindu Group of Publications, 7th June 2004.

expensive fares which have prevented many Indians from flying and the prevalence of the country's rail network.²⁶

Sanjay Jog & Sitanshu Swain, in an article titled, **“LIC, New India Back FDI Hike Proposal”**, writes that The Life Insurance Corporation (LIC) of India and New India Assurance, the leaders in life insurance and general insurance, respectively, have said that the increase in the foreign investment cap from the current 26% may allow further flow of foreign investment into the sector. They further said that, R. Beri, chairman & managing director, New India Assurance, has justified the proposed hike of the FDI limit by saying that this would facilitate foreign players to take more active role and also share the risk in the Indian market. “This may also lead to introduction of new products and better techniques in administration, which would benefit the whole industry,” he said.²⁷

Diana Farrell, in her article titled, **“The Case for Globalization: The Results of McKinsey's Latest Study of the Pros and Cons of Emerging Market Foreign Investment”**, opines that the Few topics are more intensely debated or generate more contrasting emotions than the merits and costs of globalization, particularly foreign direct investment (FDI) by multinational companies in emerging markets. The McKinsey Global Institute studied the impact of FDI on local industries in China, India, Brazil, and Mexico. The research shows that FDI is indeed good for the economic health of developing nations--regardless

²⁶ “India to Raise Amount of Foreign Investment Allowed in Domestic Airlines”, Airline Industry Information, October 20, 2004.

²⁷ Sanjay Jog & Sitanshu Swain, “LIC, New India Back FDI Hike Proposal”, The Financial Express, 28th October 2004.

of the policy regime, industry, or time period studied. In thirteen out of fourteen case studies, FDI improved productivity and output in the sector, raising national income while lowering prices and improving quality and selection for consumers.²⁸

Jorge Heine, Ambassador of Chile to India, in his article entitled, “**Attracting FDI, Chilean Style**”, said that to attract the FDI India needs, it can follow the Chilean model of developing a public concessions system to build infrastructure. A policy driven development strategy can make a huge difference for economic growth and competitiveness. The enabling conditions for such things to occur must be created by the government. Public concessions for infrastructure are one of the most promising area for public-private partnerships to flourish and to attract the FDI India needs.²⁹

Richard D Smith, in his article entitled, “**Foreign Direct Investment and Trade in Health Services**”, says that the Globalization is a key challenge facing health policy-makers. A significant aspect of this is direct trade in health services, as a result of the rise of transnational corporations, challenges in health care financing, porous borders and improved technology creating the scope for increased ‘foreign direct investment’ (FDI) in health care. But countries should take a step back and first think through the risks and benefits

²⁸ Diana Farrell, “The Case for Globalization: The Results of McKinsey's Latest Study of the Pros and Cons of Emerging Market Foreign Investment”, *International Economy*, Wntr 2004.

²⁹ Jorge Heine, “Attracting FDI, Chilean Style”, *The Hindu* 16th December 2004.

of commercialization of their health sector, rather than being sidetracked in to considering the level of foreign investment.³⁰

Fuming Jiang, in his work, **“An Exploratory Investigation of International Pharmaceutical Firms' FDI Decision into China: A Comparison Between Eastern-Firms and Western-Firms”**, defines that international pharmaceutical firms' FDI into China were predominantly driven by China's specific location factors. China's market size with its great potential played the most important role. China's rapid economic development & growth and its open-door policy were other two important determinants. Relative stable political conditions and incentive policies provided by China were also considered as important factors. The impact of relatively stable political conditions in China on western pharmaceutical firms' FDI into China was significantly greater than that on eastern firms'. Incentive policies provided by China received more attention from eastern firms.³¹

In an article captioned, **“India should Encourage FDI Inflows from NRIs”**, appeared in **“The Financial Express”**, highlighted that India needs to encourage more FDI inflows through NRI population. There is an imperative need for NRI engagement, especially the second generation of NRIs. There is

³⁰ Richard D Smith, “Foreign Direct Investment and Trade in Health Services”, ELSEVIER; Social Science and Medicine 2004.

³¹ Fuming Jiang, “An Exploratory Investigation of International Pharmaceutical Firms' FDI Decision into China: A Comparison Between Eastern-Firms and Western-Firms”, Journal of the Academy of Business and Economics, January 2003.

tremendous potential and synergy existing between the skill sets possessed by the second generation NRIs for the development needs of India.³²

G.Ramachandran and Chandrasekhar Krishnamurti, in their joint article entitled, **“How not to Measure FDI”**, opines that India needs to shed its bias towards the dollar value FDI and switch to the utilitarian approach. It can gain much by switching to measures of performance that include the number of ‘jobs’, innovative leadership, methods, processes, organization structures, and incentives that would make FDI work. Like China, India must nourish FDI.³³

An article captioned, **“China may lose FDI to India”**, published in **Emerging Markets Economy**, visualized that China could lose Foreign Direct Investment (FDI) to India in the wake of Severe Acute Respiratory Syndrome (SARS).³⁴

In an article titled, **“FDI Impact on India’s Manufacturing Exports”**, **N Chandra Mohan**, visualized that since the decade of reform of the 1990s, academic research has focused on the impact foreign direct investment (FDI) has had on promoting manufacturing exports in India. Referring to the Rashmi Banga’s study, he stated that as American FDI is mainly in high technology and undertaken by larger firms when compared to Japanese FDI, it may thus be expected that higher the level of technology at which a US firm operates, the higher will be its comparative advantage to export vis-a-vis Japanese firms. A differential impact on export-intensity of the industry might be expected for similar theoretical reasons even at a industry level. He concludes by saying

³² “India should Encourage FDI Inflows from NRIs”, “The Financial Express”, 8th January 2003.

³³ G.Ramachandran and Chandrasekhar Krishnamurti, “How not to Measure FDI”, Financial Daily, The Hindu Group of Publications, 29th July 2003.

³⁴ “China may lose FDI to India”, Emerging Markets Economy, 5th August 2003.

that, in an era of reforms, it is perhaps easier to maximise the contribution of all FDI, including Japanese, by promoting its integration with domestic firms through fiscal and tariff policies rather than cherry-pick the FDI we want.³⁵

An article captioned, **“India and FDI: The Gap between Potential and Performance”**, appeared in **“The Financial Express”**, stated that India, with its large market and labour force, will continue to attract FDI but doesn’t do better because the business environment is difficult. There are uncertainties about receptivity to FDI, infrastructure is inadequate and there are red tape and bureaucratic hurdles. World Investment Report (WIR) now has a performance and potential index. In the performance index for 1999-2001, India ranks 120th out of 140. In the potential rankings, India ranks 84th out of 140. While it is understandable that FDI potential cannot be immense in a large country, the gap between potential and performance indicates that India is an under-performer. Other than broader reforms and easing bureaucratic procedures, the time has come to scrap the no objection certificate system for manufacturing and removal of sectoral caps on services. The anti-export bias in many of our economic policies, notwithstanding the recent improvement in export performance, must end if FDI has to be attracted since foreign investors aim for both the domestic and export markets.³⁶

³⁵ N Chandra Mohan, “FDI Impact on India’s Manufacturing Exports”, “The Financial Express”, 18th August 2003.

³⁶ “India and FDI: The Gap between Potential and Performance”, “The Financial Express”, 24th September 2003.

Rashmi Banga, in her article entitled, **“Impact of Government Policies and Investment Agreements on FDI Inflows to Developing Countries: An Empirical Evidence”**, says that the last two decades have witnessed an extensive growth in foreign direct investment (FDI) flows to developing countries. This has been accompanied by an increase in competition amongst the developing countries to attract FDI, resulting in a rise in fiscal incentives offered by the host governments, removal of restrictions and signing of bilateral and regional investment agreements, after controlling for the effect of economic fundamentals of the host countries. But fiscal incentives do not have any significant impact on aggregate FDI but the removal of restrictions attracts it. However, FDI is attracted to different selective policies. While lowering of restrictions attract FDI from developed countries, fiscal incentives and lower tariffs attract FDI from developing countries. BITs found to have a significant impact on aggregate FDI. But it is BITs with developed countries rather than developing countries that are found to have a significant impact on FDI inflows to developing countries.³⁷

Siyakumar Venkataramany, in his work entitled, **“Determinants of Foreign Direct Investment in India: An Empirical Analysis of Source Countries and Target Industries”**, observed that the emerging markets possess a lot of potential for Foreign Direct Investment (FDI). FDI in India is on the increase but the country has not experienced a rapid growth of FDI inflow. Theories of FDI suggest that firm size, profitability, trade, interest rate, economy and

³⁷ Rashmi Banga, “Impact of Government Policies and Investment Agreements on FDI Inflows to Developing Countries: An Empirical Evidence”, Indian Council for Research on International Economic Relations, New Delhi, November 2003.

inflation wield significant influence in attracting FDI. He explore the factors that contribute to the explanation of FDI in India and tests whether the variables do really influence the flow of FDI into India.³⁸

Devendra Mishra, Member of Indian Revenue Services, in his article entitled, **“FDI-led vs. Entrepreneurial Growth: Divergent Paths taken by India and China”**, has visualized that China’s rapid growth, increasing openness, developing consumer market, and large, low-cost labour force, are all making it the global focal point for FDI. But the FDI-driven manufacturing boom has its limitations. Indeed, India’s home-grown entrepreneurs may give it a long-term advantage over a China hamstrung by inefficient banks and capital markets. China and India have pursued radically different development strategies. While China is following a path that seems to have outlived its utility, India is following the right road to the future.³⁹

An articulated captioned, **“Media in the FDI Arena”**, contributed by **Arvind Virmani**, senior advisor, Planning Commission, opines that the public debate on foreign entry into print media largely treats it as a single, broad, undifferentiated sector. Most seem to be discussing the narrow issue of foreign entry into the newspaper business. He tries to throw some new ideas into the public arena so that a differentiated FDI policy can be defined for the various categories of media. He further said that the Indian economy can become a knowledge-based economy by 2025 if we can provide universal access to

³⁸ Sivakumar Venkataramany, “Determinants of Foreign Direct Investment in India: An Empirical Analysis of Source Countries and Target Industries”, Ashland University, USA 2003.

³⁹ Devendra Mishra, “FDI-led vs. Entrepreneurial Growth: Divergent Paths taken by India and China”, Financial Daily, The Hindu Group of Publications, 12th December 2003.

primary and secondary education in the next decade or so, and if we open our minds to the best and latest knowledge from all over the world. A competitive, wisely-regulated media, both print and electronic, has an important role to play in this process.⁴⁰

Tapas Das, from CUTS-Jaipur, in his article entitled, **“Courting FDI with a Game Plan”**, opines that an industrialisation strategy based on a universally liberal policy to allow foreign investment across all sectors may not be successful in the long run. Developing countries would do well to adopt more differentiated and strategic approach. Government should design their policy towards MNCs according to the needs of particular sectors because each sector serves a different function in the overall economic development of a country. A government may adopt two strategies in relation to MNC participation. One is to have a liberal FDI policy initially to develop an industry. Once the industry has developed sufficient technological capability and local firms have been able to stand on their own feet, it could impose tougher restrictions on MNCs. Another strategy could be to relax rules in relation to MNC participation in an industry when there is a major technological change that making inadequate for international competition the country’s a present technological capability.⁴¹

Yung-Chul Kwon in his article entitled, **“Effects of Vertical and Horizontal FDI Projects on a host Country’s Economy: Trade and Local Linkages”**, examines the effects of an FDI on a host country’s trade balance and the local-

⁴⁰ Arvind Virmani, “Media in the FDI Arena”, Business Standard. 24th June 2002.

⁴¹ Tapas Das, “Courting FDI with a Game Plan”, Business Line, Financial Daily-The Hindu Group of Publications, 2nd July 2002.

linkages relative to various types of FDI projects, i.e., vertical FDI projects vs. horizontal FDI projects. It was assumed that the effects of FDIs on host country's economy are different with regard to a vertical vs. horizontal FDI project. Based on 108 FDI projects undertaken by Korean firms, it was found that vertical investment projects have a greater effect on both, the export-creation and import-creation than with horizontal investment projects. Horizontal foreign investment projects, however, have a greater effect than vertical foreign investment projects with respect to local linkages. These findings suggest that the host government's policy (e.g. incentives or regulations) towards inward FDIs should be differentiated by the types of FDI projects based on different contributions made to the host country economy.⁴²

Bharat Jhunjunwala, in his article entitled, **“World Integration without FDI”**, opines that India needs to attract large amount of FDI in order to integrate itself with the rest of the world but we must examine if it is possible to integrate through foreign trade, as the impact of foreign investment and foreign trade on the economy are different. It is believed that foreign investment supplements saving and, therefore, adds to growth. But the fascination for foreign investment can cause the host country to ignore its domestic savings and lead to a decline in the same. The experience of nearly all the developing countries, barring China has been that foreign investment leads to low growth in the long-run. Thus the policy-makers should realize that though the short-term impact of FDI is positive, the long-term impact appears

⁴² Yung-Chul Kwon, “Effects of Vertical and Horizontal FDI Projects on a host Country's Economy: Trade and Local Linkages”, *Foreign Trade Review, Quarterly Journal of Indian Institute of Foreign Trade*, October 2001-March 2002.

to be negative. India will not emerge a global economic power by going after FDI. The correct strategy would be to focus on the increased and better utilization of our domestic savings, and instituting a domestic competition policy. This will indeed make India a world economic power. FDI, where necessary, may be approved, but only after a technological and social audit.⁴³

Susan E Feinberg and Sumit K Majumdar in their joint work, **“Technology Spillovers from Foreign Direct Investment in the Indian Pharmaceutical Industry”**, examines whether knowledge spillovers from MNCs' local R&D activities benefit domestic firms in the Indian pharmaceutical industry from 1980-1994. In a policy environment that restricted FDI and provided weak intellectual property protection, they find that the only significant R&D spillovers in the Indian pharmaceutical sector were between MNCs and each other. They explore the implications of their findings in light of India's economic and industrial policy goals and implementation.⁴⁴

V. N. Balasubramanyam, in his work entitled, **“Foreign Direct Investment in Developing Countries: Determinants and Impact”**, addresses two interrelated issues of concern to developing countries; factors which determine FDI flows and the preconditions for the efficient utilization of FDI in the development process.⁴⁵

⁴³ Bharat Jhunjhunwala, “World Integration without FDI”, Business Line, Financial Daily-The Hindu Group of Publications, 11th November 2002.

⁴⁴ Susan E Feinberg and Sumit K Majumdar, “Technology Spillovers from Foreign Direct Investment in the Indian Pharmaceutical Industry”, Journal of International Business Studies (2001).

⁴⁵ V. N. Balasubramanyam, International Business Research Group, Department of Economics, Lancaster University “Foreign Direct Investment in Developing Countries: Determinants and Impact”, OECD Global Forum on International Investment, November 2001.

Nagesh Kumar, in his article entitled, **“Infrastructure Availability, Foreign Direct Investment Inflows and Their Export-Orientation: A cross-Country Exploration”**, has observed that the investments by the Government in providing efficient physical infrastructural facilities does contribute to the relative attractiveness of a country towards FDI by MNEs, holding other factors constant. MNEs may be particularly sensitive to infrastructure availability for locating their investments designed to feed the global, regional or home country markets. Furthermore, the export-orientation of production of MNE affiliates, especially when the production is meant for third country markets, is significantly related to infrastructure availability. Therefore, MNEs decision making pertaining to location of product mandates for global or regional markets sourcing is significantly influenced from infrastructure availability considerations. Thus infrastructure development should become an integral part of the strategy to attract FDI inflows in general, and export-oriented production from MNEs in particular.⁴⁶

Syed Aziz Anwar, in his article entitled, **“Reassessing Determinants of FDI in Some Emerging Economies”**, tries to cite evidence of FDI in some of the oft-quoted emerging economies and explore its determinants. With believe that it would enrich existing literature on FDI and help policy-maker in various parts of the world.⁴⁷

⁴⁶ Nagesh Kumar, “Infrastructure Availability, Foreign Direct Investment Inflows and Their Export-Orientation: A cross-Country Exploration”, Research and Information System for Developing Countries New Delhi. 20th November 2001.

⁴⁷ Syed Aziz Anwar, “Reassessing Determinants of FDI in Some Emerging Economies”, Foreign Trade Review, Quarterly Journal of Indian Institute of Foreign Trade, July-September 1999.

In an article captioned, **“ASEAN call for Foreign Investment”**, published in **“Business Asia”**, **Hadenan Abdul Jalil** says that for development, the Association of South East Asian Nations (ASEAN) must target long-term foreign direct investment (FDI) which goes to the real economy. He further explains that while external resources were required for development, there was a need to look out for flows of short-term capital or hedge funds that move in and out of a country at will. He also said countries would need to be prudent in both their economic policy and economic management.⁴⁸

Uma H. Mani and James C. Baker in their article entitled **“Foreign Direct Investment in India: Problems and Prospects”**, has examined the foreign investment environment in India and analyze the nation’s strength and weaknesses. While talking about the potential of Indian economy they also bring to our attention the problems of investing in India and suggest the strategies to tackle and overcome the hurdles. They concluded that India shows signs of economic reform which will albeit slowly, improve the country’s environment for FDI. Such a country with its democratic government, skilled and growing labour supply and important geopolitical location should become a successful emerging market in the 21st century, if its FDI goals are met.⁴⁹

Ganesh Natarajan, in his article entitled, **“India: The New Asian Tiger?”**, says that Over the past three years, India--the largest democracy in the world--has put into place the foundations of a deregulated market-driven system. The

⁴⁸ “ASEAN call for Foreign Investment”, *Business Asia*, July 6, 1998.

⁴⁹ Uma H. Mani and James C. Baker, “Foreign Direct Investment in India: Problems and Prospects”, *Foreign Trade Review, Quarterly Journal of Indian Institute of Foreign Trade*, April-September 1997.

government appears to have secured broad social and political support for the direction of this change. Clearly the government is banking on a deregulated environment for securing economic growth. Manufacturing is the engine driving the current faster growth, and foreign direct investment (FDI) is seen as essential in this strategy. So the economic policies instituted by the government, including such areas as removing import barriers and reducing tariffs and corporate taxation, are focused on making India a more attractive place to do business.⁵⁰

OBJECTIVE OF THE STUDY

FDI like any other concepts can be defined through the microeconomic approach or macroeconomic approaches. Micro-economic approach attempts to explain why some firms of one country are successful in penetrating into other markets and others fail while the macro-economic approach tries to examine why firms seek international expansion and what advantages it have. Theories of FDI suggest that for potential developing countries like India firm size, profitability, trade, interest rates, economy and inflation and its economic and foreign policies wield significant influence in attracting FDI.

This study emphasizes on the latter approach and focuses on the impact of macro-economic variables on FDI and seeks to explain the recent increase of inflow of FDI into India with greater emphasis on inflows from Germany especially in IT sector.

⁵⁰ Ganesh Natarajan, "India: The New Asian Tiger?", Business Horizons, May-June 1995.

The main objectives of this study are:

- To explore the factors that contribute to the explanation of FDI in India.
- To test whether certain variable do really influence the flow of FDI into India.
- To evaluate the significance of FDI to Indian Economy.
- To study the trends of German FDI to India especially in IT sector.
- To analyse, what corrective India has failed to attract the most sought FDI as compared to other Asian countries.
- This study also thoughts light on availability of timely and reliable information about the policies and procedures governing FDI in India.
- To bring to the notice, the problems faced by the foreign investors in India.

Hypothesis Formulation:

The study proposes that there is a positive relationship between German FDI and above mentioned parameters of the host economy i.e., market size , trade balance, service sector (IT enabled services) Inflation rate. It also proposes that there is a dialectic and spiraling effect of FDI vis-à-vis fundamentals of an economy.

Scope of the Study

FDI has become the most sought-after sources of development finance for all developing countries, Asian countries being the major recipient among them.

With its growing significance in the overall capital flow to merging markets a detailed study to understand its dynamics and nature becomes essential.

This study seeks to review some of the pros and cons of FDI, to broadly consider possible roles and responsibilities of institution in order to utilize FDI in more effective manner and suggest some key questions that will need to be faced.

Although the greater chunk of FDI comes to the developing countries. India is unable to attract the expected share in it. India receives lower rate of FDI as compared to the other developing countries in Asia. The ratio of investment to GDP has been much lower than that of Latin America and Asia. The study focus on the main challenges faced by the governments to identify the factors which restrain the flow of FDI as well as the factors which enhance FDI inflows. It also highlights the policies that should be formulated and implemented to accelerate the positive impact of FDI flows and reduce its negative affects.

This study also focus on the various types and theories of FDI which highlights FDI from many different angles. The study mainly concentrates on the German FDI inflows to India related specifically to the IT sector, reveling the contribution of German FDI in the overall development of the economy. It also pinpoint the reasons of the decline in the FDI flows in late 90's and also suggests the future strategies to increase the FDI inflows to country.

The Research Methodology Adopted

The present research work is mainly based on the secondary data. This data is collected from various sources. These sources include:

- Financial and Business dailies.
- Periodicals, magazines and journals
- Various text books on the subject
- newspapers
- Internet
- Others.

Outline of the Thesis

As was stated earlier, the aim of this study is to discuss FDI flow to India in a globalising economic environment with greater emphasis on inflow from Germany, particularly in IT sector. Chapter one consists of seven sections. Section one and two deal with brief introduction of FDI and its importance to India, especially German FDI inflows. After the introduction section three provides the review of Literature. Section four and five states the objective and scope of the study while section six explains the research methodology Adopted. Section seven have outline of the thesis.

Chapter two deals with the meaning as well as the types of FDI. It also discusses the role of FDI to the Indian economy. Reviews of various theories of FDI are also discussed at length in this chapter.

Chapter three discusses in detail the significance of FDI to Indian economy. It focuses on the trends of FDI inflows since 1991 mentioning the type of FDI received by different countries to the different sectors.

Chapter four revolves around the trends in German FDI flows to India since liberalization. It provides as much data as possible on the total German FDI flows- industry, sector and state wise.

Chapter five through light on the problems faced by the foreign investors in making investments in India. The reasons why India fails to attract the FDI from Germany. It also provide the suggestions for the improvements.

Chapter-2

Conceptual Framework of FDI

Conceptual Framework of FDI

Foreign direct investment (FDI) is a key element in the rapidly evolving process of international economic integration. FDI creates direct, stable and long-lasting links between economies. FDI encourages the transfer of technology and know-how between countries, and it allows the host economy to promote its products more widely in international markets. Finally, FDI is an additional source of funding for capital investment.

Definitions:

Foreign Direct Investment (FDI) is defined as an investment that is made to acquire a lasting management interest (usually 10 percent of voting stock) in an enterprise operating in a country other than that of the investor (defined according to residency), the investor's purpose being an effective voice in the management of the enterprise. It is the sum of equity capital, re-investment of earnings, other long term capital and short term capital as shown in the balance of payment.⁵¹

Foreign direct investment (FDI) is defined as an investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy. The *lasting interest* means the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the direct investor on the management of the direct investment enterprise. Absolute control by the

⁵¹ World Bank, " Global Development Finance Plea 2002".

foreign investor is not required, and ownership of 10% of the voting power is the criterion used.

Inward stocks are the direct investments held by non-residents; *outward stocks* are the investments held in other economies.

The stock tables also show the distribution of stocks according to industry (mainly manufacturing) and services

Foreign direct investment (FDI) is defined as a long term investment by a foreign direct investor in an enterprise resident in an economy other than that in which the foreign direct investor is based. In other words, "investment made to acquire lasting interest in enterprises operating outside of the economy of the investor." The FDI relationship, consists of a parent enterprise and a foreign affiliate which together form a transnational corporation (TNC). In order to qualify as FDI the investment must afford the parent enterprise control over its foreign affiliate. The UN defines control in this case as owning 10% or more of the ordinary shares or voting power of an incorporated firm or its equivalent for an unincorporated firm.⁵²

FDI stands for Foreign Direct Investment, a component of a country's national financial accounts. Foreign direct investment is investment of foreign assets into domestic structures, equipment, and organizations. It does not include foreign investment into the stock markets. Foreign direct investment is thought to be more useful to a country than investments in the equity of its

⁵² Wikipedia, the free encyclopedia, <http://en.wikipedia.org>.

companies because equity investments are potentially "hot money" which can leave at the first sign of trouble, whereas FDI is durable and generally useful whether things go well or badly.⁵³

Foreign direct investment (FDI) has become a key component of national development strategies for almost all the countries over the globe. FDI is considered to be an essential tool for jump-starting economic growth through its bolstering of domestic capital, productivity and employment.

The reliance on FDI is rising heavily due to its all round contributions to the economy. The important effect of FDI is its contributions to the growth of the economy. FDI has an impact on country's trade balance, Increasing labour standards and skills, Transfer of new technology and innovative ideas, Improving infrastructure, skills and the general business climate.

Foreign direct investment (FDI) is considered to be the lifeblood for economic development as far as the developing nations are concerned. FDI to developing countries in the 1990s was the leading source of external financing. The rise in FDI volume was accompanied by a marked change in its composition. That is investment taking the form of acquisition of existing assets (mergers and acquisitions) grew much more rapidly than investment in new assets particularly in countries undertaking extensive privatization of public enterprises.⁵⁴

⁵³ (Econterms) econterms@econterms.com

⁵⁴ economywatch.com.

Foreign Direct Investment (FDI) is when a business sets up operations or buys assets in a foreign country. Foreign Direct Investment is defined by enabling some control over the acquired asset.⁵⁵

Definition: Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows in the reporting economy. Data are in current U.S. dollars.⁵⁶

IMF Definition

- According to the BPM5, foreign direct investment is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise.

According to International Monetary Fund (IMF) definition contained in the Balance of Payments Manual, Fifth Edition (BPM-5), FDI has three

⁵⁵ www.the-chiefexecutive.com

⁵⁶ International Monetary Fund, International Financial Statistics and Balance of Payments databases, and World Bank, Global Development Finance.

components, viz., equity capital, reinvested earnings and other direct capital. A large number of countries, including several developing countries report FDI inflows in accordance with the IMF definition, which include reinvested earnings and other direct capital flows, besides equity capital. The Reserve Bank of India (RBI) reports FDI inflows only on the basis of investments received from non-residents on equity and preference share capital under the FDI scheme. As FDI data released by RBI do not capture reinvested earnings and other capital, these inflows to India do not fully comply with standard international coverage and are, therefore, not comparable with FDI data released by many other countries of the world.

With a view to bringing the present FDI reporting system of RBI in alignment with the international reporting system, Government, in consultation with RBI, had constituted a Committee comprising officials from RBI and the Department of Industrial Policy and Promotion (DIPP), Government of India (GoI) in May 2002 to study the conceptual and methodological issues, including data gaps involved and make necessary recommendations to strengthen the collection, compilation and reporting of FDI data. Accordingly, the RBI has recently revised data on FDI flows from the year 2000-01 onward by adopting a new definition of FDI. The revised definition includes three categories of capital flows under FDI: equity capital, reinvested earnings and

other direct capital. Previously, the data on FDI reported in the balance of payments statistics used to include only equity capital.⁵⁷

OECD Benchmark Definition of Foreign Direct Investment (Third Edition)

- FDI reflects the objective of obtaining a lasting interest by a resident entity in one economy (*direct investor*) in an entity resident in an economy other than that of the investor (*direct investment enterprise*). The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise. Direct investment involves both the initial transaction between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated.

As is evident from the above definitions, there is a large degree of commonality between the IMF, UNCTAD and OECD definitions of FDI. Since the IMF definition is followed internationally, the Committee is in favour of following the IMF definition.⁵⁸

⁵⁷ International Monetary Fund (IMF), Balance of Payments Manual, Fifth Edition (BPM-5)

⁵⁸ Third Edition of the OECD Benchmark Definition of Foreign Direct Investment, 1996

UNCTAD Definition

- The WIR02 defines FDI as ‘an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the FDI enterprise, affiliate enterprise or foreign affiliate. FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transactions between them and among foreign affiliates, both incorporated and unincorporated. Individuals as well as business entities may undertake FDI.
- Flows of FDI comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. FDI has three components, viz., equity capital, reinvested earnings and intra-company loans.⁵⁹

⁵⁹ UNCTAD, World Investment Report 2002

Equity capital is the foreign direct investor's purchase of share of an enterprise in a country other than its own.

Reinvested earnings comprise the direct investors' share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates, or earnings not remitted to the direct investor. Such retained profits by affiliates are reinvested.

Intra-company loans or intra-company debt transactions refer to short or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.

Balance of Payments Manual Definition

- A direct investment enterprise is defined in the IMF Manual as an incorporated or unincorporated enterprise in which a direct investor, who is resident in another economy, owns 10 per cent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise). Direct investment enterprises comprise those entities that are subsidiaries (a non-resident investor owns more than 50 per cent), associates (an investor owns 50 per cent or less) and branches (wholly or jointly owned unincorporated enterprises) either directly or indirectly owned by the

direct investor. Subsidiaries in this connection also may be identified as majority owned affiliates. Although the 10 per cent criterion is specified in the Manual, some countries may choose to allow for two qualifications that involve a degree of subjective judgment.

- First, if the direct investor owns less than 10 per cent (or none) of the ordinary shares or voting power of the enterprise but has an effective voice in management, the enterprise may be included.
- Second, if the investor owns 10 per cent or more but does not have an effective voice in management, the enterprise may be excluded. Although the application of these two qualifications is not recommended in BPM5, the manual says that the countries that apply such qualifications should identify the aggregate value of transactions in order to facilitate international comparability.
- Direct investors may be individuals, incorporated or unincorporated private enterprises; associated groups of individuals or enterprises; governments or government agencies; or estates, trusts, or other organisations that own direct investment enterprises in economies other than those in which the direct investors reside.

- The components of direct investment capital transactions are recorded on a directional basis (i.e., resident direct investment abroad and non-resident direct investment in the recording economy).⁶⁰

There are striking elements of non-conformance between the IMF definition of FDI and that used by the RBI for computational purposes. In fact, compared to the international standard, the Indian FDI statistics appears to be limited because it includes only one component — foreign equity capital reported on the basis of issue/transfer of equity or preference shares to foreign direct investors. Some of the principle components that India excludes from the IMF definition while estimating actual FDI inflows are:

- 1) Reinvested earnings by foreign companies (which are part of foreign investor profits that are not distributed to shareholders as dividends and are reinvested in the affiliates in the host country).
- 2) Proceeds of foreign equity listings and foreign subordinated loans to domestic subsidiaries as part of inter-company (short and long-term) debt transactions.
- 3) Overseas commercial borrowings (financial leasing, trade credits, grants, bonds) by foreign direct investors in foreign invested firms.

⁶⁰ International Monetary Fund (IMF), Balance of Payments Manual, Fifth Edition (BPM-5)

- 4) Non-cash acquisition of equity, investment made by foreign venture capital investors, earnings data of indirectly held FDI enterprises, control premium, non-competition fee etc., as per IMF definition, which are normally included in other country statistics.

All of these account for a massive underestimation of FDI in India and therefore with appropriate adjustment (of course, not including all of the above) consistent with IMF standards, the FDI data in India could be substantially enhanced.

- As mentioned above, an especially important component of FDI that is excluded in India constitutes the reinvested earnings, which companies so far have reported on a sporadic and voluntary basis. India has had foreign companies here for decades and many of them have reinvested heavily over the years. If the retained earnings from all these are cumulated, then the current returns on the stock of retained earnings would have to be added to the returns on measured FDI. Added together, these total returns would be high relative to the stock of measured FDI. However, even the flow in recent years can increase since several multinationals have been reinvesting their

profits in India and this is not being captured as FDI, a practice China adopts.

China, contrary to India, adheres to the IMF standard of FDI computing. China includes all the components of IMF in its definition of FDI. It also classifies imported equipment as FDI, while India captures these as imports in its trade data. China's FDI numbers also include a substantial amount of round tripping. In the process, the actual inflows are vastly underestimated in India's FDI reporting in comparison to such countries as China that adhere to the IMF standard of FDI computing.

The non-conformance of India's FDI statistics to international standards has denied the aggregate FDI data for India direct comparability to those of most of the other countries. Especially, the fact that FDI inflows in India are entirely measured on equity investments while ignoring other components implies that FDI inflows into India have been underestimated.

The IMF definition of FDI includes 12 different elements:

- ❖ *Equity capital,*
- ❖ *Reinvested earnings of foreign companies,*
- ❖ *Inter-company debt transactions,*
- ❖ *Short-term and long-term loans,*
- ❖ *Financial leasing,*
- ❖ *Trade credits,*

- ❖ *Grants,*
- ❖ *Bonds,*
- ❖ *Non-cash acquisition of equity,*
- ❖ *Investment made by foreign venture capital investors,*
- ❖ *Earnings data of indirectly-held FDI enterprises,*
- ❖ *Control premium and non-competition fee.*

China includes all these in its calculation of FDI, while the Indian FDI reports only equity capital as FDI. Similarly, China reports imported equipments as FDI, while India includes these imports in its trade data. Moreover, China also includes domestic money coming through Macau, Taiwan and HK in calculating its FDI inflows (often called "round-tripping" - i.e., domestic money routed through these destinations to be reinvested in mainland China, to avail concessions, tax breaks etc.). Estimates show that this can be as large as 40-60% of China's total FDIs.

No explicit definition of Foreign Direct Investment (FDI) is offered. In Dunning's (1988) words, FDI comprises activities that are controlled and organized by firms (or groups of firms) outside of the nation in which they are headquartered and where their principal decision makers are located. In the context of the manufacturing sector, FDI is conventionally thought of in terms of branch plant or subsidiary company operations that are controlled by parent companies based in another country. The foreign country is the host economy,

the country that receives the FDI, and the country where decision making control resides is the donor (or home) country.⁶¹

An important distinction is normally made between FDI and portfolio investment. Thus, portfolio investment, is the supply of capital ('money') from a lender (for example, a bank) to a borrower (for example, a manufacturing company) in an agreement which requires borrowers to pay back the 'loan' plus interest (the rate of return to the lender) over a number of years. The distinction between FDI and portfolio investment may get entangled and clearly shareholders (equity owners) are interested in a rate of return. Indeed, 'maximizing shareholder value' has become a widely touted goal of many corporations in present times. Nevertheless, there are clearly important differences between FDI and portfolio investment. As Dunning (1988) points out, FDI involves issues of direct control as resources are transferred internally within firms rather than externally between independent firms. In the case of FDI, parent companies have control over both day to day operations of their investment and their nature and scope in the long run. It is true that parent companies often devolve many aspects of decision making to subsidiaries or branch plants themselves but even so parents have 'ultimate' control over strategy and the right to change the decision making autonomy of subsidiaries. Moreover, in the case of FDI (but not portfolio investment) it is not simply capital that is transferred but potentially a range of resources (technology, management, marketing skills). Indeed, it is the return on these resources that is

⁶¹ Dunning's (1988)

of primary concern to FDI while it is the rate of return on capital that motivates the supply of portfolio investment.

It might also be noted that in the context of FDI, control and ownership are related but different concepts. Berle and Means (1932) noted that ownership of corporations by shareholders does not imply control by these same shareholders. Their point was that the great mass of shareholders may have little to say in the direction of companies. In recent decades, the point is frequently made that minority 'institutional' shareholders may exercise effective control. Dunning (1988) and Dicken (1976) provide good discussions of the issues relating to ownership and control. In geography, the locus of control is normally taken as the location of head-offices, regardless of whether the key decision makers are shareholders or not, and regardless of where the shareholders live.

Types of FDI:

Foreign Direct Investment (FDI) is classified under various heads. Following are the few types of FDI:

By Direction

a) Inward

Inward foreign direct investment is when foreign capital is invested in local resources.

b) Outward

Outward foreign direct investment, sometimes called "direct investment abroad", is when local capital is invested in foreign resources.

By Target

a) Greenfield investment

Direct investment in new facilities or the expansion of existing facilities. Greenfield investments are the primary target of a host nation's promotional efforts because they create new production capacity and jobs, transfer technology and know-how, and can lead to linkages to the global marketplace. The Organization for International Investment cites the benefits of Greenfield investment (or insourcing) for regional and national economies to include increased employment (often at higher wages than domestic firms); investments in research and development; and additional capital investments. Criticism of the efficiencies obtained from Greenfield investments include the loss of market share for competing domestic firms. Another criticism of Greenfield investment is that profits are perceived to bypass local economies, and instead flow back entirely to the multinational's home economy. Critics contrast this to local industries whose profits are seen to flow back entirely into the domestic economy.

b) Mergers and Acquisitions

Transfers of existing assets from local firms to foreign firms takes place; the primary type of FDI. Cross-border mergers occur when the assets and operation of firms from different countries are combined to establish a new legal entity. Cross-border acquisitions occur when the control of assets and operations is transferred from a local to a foreign company, with the local company becoming an affiliate of the foreign company. Unlike Greenfield investment, acquisitions provide no long term benefits to the local economy--even in most deals the owners of the local firm are paid in stock from the acquiring firm, meaning that the money from the sale could never reach the local economy. Nevertheless, mergers and acquisitions are a significant form of FDI and until around 1997, accounted for nearly 90% of the FDI flow into the United States. Mergers are the most common way for multinationals to do FDI.

c) Horizontal FDI

Investment in the same industry abroad as a firm operates in at home. Increased uncertainty should encourage horizontal FDI. For mature markets that supposedly attract mainly horizontal FDI, greater volatility significantly increases FDI inflows.

d) Vertical FDI

Vertical FDI takes place when the multinational fragments the production process internationally, locating each stage of production in the country where it can be done at the least cost.

Increased uncertainty should discourage vertical FDI. For emerging markets that receive relatively more vertical FDI inflows, increased volatility does not increase FDI inflows.

Vertical FDI can further be classified as:

Backward Vertical FDI:

Where an industry abroad provides inputs for a firm's domestic production process.

Forward Vertical FDI :

Where an industry abroad sells the outputs of a firm's domestic production.

By Motive

FDI can also be categorized based on the motive behind the investment from the perspective of the investing firm

a) Resource-Seeking

Investments which seek to acquire factors of production that are more efficient than those obtainable in the home economy of the firm. In some cases, these resources may not be available in the home economy at all (e.g. cheap labor and natural resources). This typifies FDI into developing countries, for example seeking natural resources in the Middle East and Africa, or cheap labor in Southeast Asia and Eastern Europe.

b) Market-Seeking

Investments which aim at either penetrating new markets or maintaining existing ones. FDI of this kind may also be employed as defensive strategy; it is argued that businesses are more likely to be pushed towards this type of investment out of fear of losing a market rather than discovering a new one. This type of FDI can be characterized by the foreign Mergers and Acquisitions in the 1980's by Accounting, Advertising and Law firms.⁶²

c) Efficiency-Seeking

Investments which firms hope will increase their efficiency by exploiting the benefits of economies of scale and scope, and also those of common ownership. It is suggested that this type of FDI comes after either resource or market seeking investments have been realized, with the expectation that it further increases the profitability of the firm. Typically, this

⁶² Dunning, J.H., B. Kogut and M. Blomstrom (1990). *Globalization of firms and the competitiveness of nations*, Lund, Institute of Economic Research Lund University; Bromley: Cahrtwell-Bratt c 1990

type of FDI is mostly widely practiced between developed economies; especially those within closely integrated markets (e.g. the EU).

d) Strategic-Asset-Seeking

A tactical investment to prevent the loss of resource to a competitor. Easily compared to that of the oil producers, whom may not need the oil at present, but look to prevent their competitors from having it.

We here focus on the two main types of Foreign Direct Investment (FDI) flows:

1) Greenfield Investments

2) Mergers & Acquisitions

In the last 15 years, FDI has become the predominant form of external financing in developing countries, far surpassing traditional sovereign borrowing. To be sure, the growth of FDI is part of a more general trend in developing countries consisting of a rapid expansion of private capital flows and contraction of official ones.

Not only has total FDI grown in importance, but also its composition has experienced a remarkable change over the years. In developing countries, the share of cross-border mergers and acquisitions in FDI increased considerably at the end of the 1990s. The lion's share of the increase in cross-border M&A is explained by the privatization of state enterprises that took

place during the 1990s in many developing countries. The share of cross-border M&A in FDI also increased markedly in industrial countries.⁶³

Greenfield and M&A FDI have a strong, bi-directional causality in industrial countries. In developing countries, Greenfield FDI does not precede M&A FDI, but a rise in mergers and acquisitions does lead to higher Greenfield investment. In other words, FDI initially driven by the purchase of existing companies results in fresh investment in the following years.

The relationship between domestic investment and the two types of FDI is rather complex. In industrial countries, domestic investment leads M&A FDI but is led by Greenfield investment. In developing countries, domestic investment leads both types of FDI, but not the reverse (except LAC). It appears that in the case of emerging economies foreign investors prefer to hold their capital until they perceive signals of profitable opportunities through a rise of domestic investment. In the case of industrial countries, their high degree of capital market integration and widespread availability of enterprise-related information may make the relationship between foreign and domestic investment more likely to be bi-directional.⁶⁴

As far as the relationship between the economic growth and FDI is concerned, in industrial countries growth leads both Greenfield and M&A FDI. In developing countries, growth only precedes Greenfield FDI. In countries

⁶³ Dunning, J.H. (1993), *Multinational enterprises and the global economy*, Wokingham, England; Reading, Mass, Addison-Wesley.

⁶⁴ Lipsey, Rober E. July 2000. "Interpreting Developing Countries' Foreign Direct Investment". National Bureau of Economic Research. Working Paper 7810.

where FDI rises as result of higher import tariffs, we should expect a negative relationship between FDI and economic growth. The opposite would occur when FDI rises because of an improvement in public infrastructure and government institutions.⁶⁵

WIR2000 suggests that, especially at the time of entry and in the short term, M&As (as compared to Greenfield investment) may involve, in some respects, smaller benefits or larger negative impacts from the perspective of host-country development.⁶⁶

Although both modes of FDI entry bring foreign capital to a host country, the financial resources provided through M&As do not always add to the capital stock, while in the case of Greenfield FDI they do. Hence a given amount of FDI through M&As may correspond to a smaller productive investment than the same amount of Greenfield FDI, or to none at all. However, when the only realistic alternative for a local firm is closure, cross-border merger or acquisition can serve as a “life preserver”.

FDI through M&As is less likely to transfer new or better technologies or skills than Greenfield FDI, at least at the time of entry. M&As may lead directly to the downgrading or closure of local production or functional activities (e.g. R&D), or to their relocation in line with the acquirer's corporate strategy.

⁶⁵ Alfaro, Laura, Chanda, Areendam, Kalemli-Ozcan, Sebnem and Sayek, selin. April 2002. “FDI and Economic Growth: The Role of Local finance Markets”. Manuscripts, Harvard Business School

⁶⁶ World Investment Report (WIR) 2000

FDI through M&As does not generate employment when it enters a country. It may lead to lay-offs, although in the case of a firm which would have gone bankrupt if it have not been acquired, it can also maintain employment. Greenfield FDI, by contrast, necessarily creates new employment at entry.

FDI through M&As can increase concentration and lead to anti-competitive results. It can also, however, prevent concentration from increasing when takeovers help preserve local firms that might otherwise have gone under. Greenfield FDI, by definition, increases the number of firms in existence and does not increase market concentration upon entry.

UNCTAD notes that most of the shortcomings of FDI through M&As, as opposed to Greenfield FDI, relate to effects at entry or soon thereafter. In the longer term, when both direct and indirect effects are taken into account, many differences between the impacts of the two modes diminish or disappear.⁶⁷

WIR2000 concludes that, under normal circumstances, Greenfield FDI is more useful, in terms of its developmental impact, to host countries than cross-border M&As. However, under exceptional circumstances — such as an economic crisis or major privatizations — cross-border M&As can play a useful role, which Greenfield FDI may not be able to play, at least within the desired time-frame.

⁶⁷ UNCTAD, World Investment Report

The need for rapid restructuring under intense competitive pressures or overcapacity in global markets may also make host countries find the option of FDI through cross-border acquisitions useful. The advantage of M&As in such conditions is that they restructure existing capacities that would otherwise risk downsizing or closure.⁶⁸

Role of FDI:

Foreign direct investment (FDI) is one of the main features of globalization and a force of global welfare for both developed and developing countries. Investment generally improves a country's economic performance but foreign direct investment brings specific advantages and plays a catalytic role in economic growth.. FDI is preferred form of capital inflow due to its stability towards economic crisis in a host country. Other forms of capital investments like portfolio equity or debts and short-term flows are subject to large reversals during the same time. Portfolio equity investments tend to be highly mobile and short-term.

Due to reforms affecting world trade and increasing pace of globalization changes the face of FDI has changed and during the last decade it has fostered faster rate of growth through out the globe. India's current export has been much faster than GDP growth over the past few decades. FDI has played an important role in modernizing a national economy and promoting economic development. We have divided the role of FDI in the following three parts:

⁶⁸ World Investment Report (WIR) 2002.

- 1) Role of FDI in economic growth
- 2) Role of FDI at country & investors level
- 3) Role of FDI in transition

By the mid 1980s, Non-resident Indians (NRIs) were allowed to invest in **Indian** companies through equity participation. Current FDI policy spells out more incentives to attract **FDI** from NRIs and Overseas Corporate Bodies (OCBs) predominantly operated by NRIs. These include 100% share in many areas and full repatriation of profit. **FDI** in power generation, telecommunications, petroleum exploration, petroleum refining and marketing, transportation sectors (specifically the roads and railways, ports and shipping, and air service) has been offered special incentives by realizing the importance of these sectors for trade and industrial development.

This abrupt increase in **FDI** inflows appears to be due to the opening up of the **Indian economy** since 1991. However, investment climate in India is far less than satisfactory. Taking into consideration the last two decades certain notables changes have taken place after 1991 reform.

- a. India's exports have grown much faster than GDP.
- b. There has been a substantial change in India's export mix owing to contribution of several factors namely the real depreciation of exchange rate, liberalization in investment policy especially from the early 1991 and the provision of export subsidies.

Four major items like Computer and telecommunication, gems and jewellery, readymade garments, engineering goods, pharmaceuticals dominate its exports and related import of technical know. However, despite increasing inflows of **FDI** especially in recent years there has been only few attempts to exploit different channels of **FDI**. Current scenarios and data suggest that demand for **Indian** exports increases when its export prices fall in relation to world prices and the real appreciation of the rupee adversely effects India's exports.

Role of FDI in Economic Growth:

The most obvious effect of FDI on the growth potential of host countries is the provision of additional capital. through inflow of foreign funds that helps in overcoming the pervasive investment-saving gap.⁶⁹ Thus enabling countries to grow faster without sacrificing current consumption. By attracting foreign venture capital, the growth potential could be raised without incurring the vulnerabilities typically associated with external debt burdens.

In many theories of economic development the main driving force behind a higher growth potential is seen in an expanding capital base. FDI in the form of M&As often does not enhance the export capacity of the host country nor reduce its dependency on imports, while profit repatriations have to be anticipated. FDI creates jobs, increases exports, and improves consumer

⁶⁹ Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan and Selin Sayek (2001). "FDI and economic growth: the role of financial markets", Harvard Business School Working Paper No. 01-083 (Boston: HarvardUniversity), mimeo.

welfare through reduced costs, wider choice and increased quality and gives business access to an improved technological and knowledge base. Inward FDI provides capital to assist the development of competitive domestic industries and infrastructure. Outward FDI provides access to a greater number of distribution channels and networks in international markets.

Because global companies often have a broader focus than the domestic markets in which they operate, inward FDI works to build export growth by shaping domestic operations into their worldwide operations.

FDI as a means of international technology transfer plays a strong role in the development of a country by absorbing their external effects relative to the education system, R&D institutions and the Intellectual Property Right regime (IPR). Attracting the type of FDI that are more conducive to the emergence of a spillover effect, and that of supporting local firms to develop those absorptive capabilities that are needed to take Researches reveal that the variables related to the science and technological knowledge (education and R&D expenditure) are not effective in attracting and absorbing foreign technologies.

a) FDI in Export Promotion

Whether **FDI** contributes to export growth or not depends on the nature of the policy regime and depends on the motive behind such investment. If the motive behind such investment is to by pass trade barriers in the host country, then it is highly unlikely that such investment would result in better export

performance. Contrary if **FDI** is motivated by the country's comparative advantage, then it may contribute to export growth.

By the early 1980s it was felt that India rigid FDI policies were a significant hindrance in this regard. India's recently liberalized FDI policy of 100% FDI stake in ventures and industrial licensing requirements, removed restrictions on expansion and facilitated easy access to foreign technology and foreign direct investment FDI. However endowed with a large pool of skilled managerial and technical expertise and as a result of a series of ambitious and positive economic reforms aimed at deregulating the economy and stimulating foreign investment India has attracted FDI from different nations. India has become one of the largest economy in the world and has undoubtedly become one of the most preferred destinations for foreign direct investments (FDI); India has strength has been information technology and chemicals, apparels, pharmaceuticals and jewellery etc.

The upward moving curve of IT sector owes some credit to a booming economy and liberalized FDI regime and the idea of 100% FDI in the construction business has automatically opened the gate of FDI inflow in built-up infrastructure and construction development projects including housing, commercial premises, hotels& resorts, hospitals & facilities, educational institutions and regional-level infrastructure. FDI has played a vital role in enhancing efficiency by bringing superior technologies and better work reflected by a huge difference between the approved and actual inflows. FDI

promotes growth through backward linkages and removing empirical ambiguity.

b) FDI - Benefits and risks in terms of balance of payments financing

FDI has direct and indirect effects on the balance of payments for the recipient country experiencing a one-time inflow of capital and later if the enterprise function profitably then a continuing outflow of funds. Direct effects include inflows of equity capital, export revenues, loans from the home country, imports of goods (from raw materials to capital goods), payments of licence fees and interest as well as after-tax profits that accrue. Indirect effects include those changes in flows that are due to the substitution of local resources for previously imported goods and services.

In countries with scarce domestic savings or inadequate credit intermediation FDI can act as a valuable supplementary source of finance. In most cases, FDI is also a less volatile source of external finance than loans and portfolio investment. Horizontal FDI is motivated by advantages in production costs, the host country's exports increases. Vertical FDI, where different production stages take place in different locations usually focusses on the global market at large. Reliable and efficient infrastructure facilities are essential for reducing costs but many developing countries including India lack reliable and efficient infrastructure facilities due to shortage of local funds and FDI in different sectors. This contributes to higher costs and poor export performance.

c) FDI and Maximization Benefits & Costs The role of FDI can be affected and complemented by recent international policy statements and local economic policies. Investment generally improves a country's economic performance. But foreign direct investment brings specific advantages.

Several studies investigated the impact of FDI, R&D expenditures, financial institutions and international trade on economic growth, but most of these studies attempted to analyze the impact of the variables on economic growth separately. The role of R&D was mostly examined from micro perspective. At the macro level final goods production is carried out by foreign and domestic firms competing for skilled labour, unskilled labour and intermediate products. In a small open economy, final goods production is carried out by foreign and domestic firms, which compete for skilled labor, unskilled labor, and intermediate products. The increase in the number of varieties of intermediate goods leads to positive spillovers to the final goods sector. As a result financial markets allow the backward linkages between foreign and domestic firms to turn into FDI spillovers.⁷⁰

In the OECD report⁷¹ concludes, foreign investors may bring important additional benefits for the host country's business environment. These manifest themselves essentially through three channels:

- 1) Linkages between FDI and international trade. The presence of foreign-owned enterprises helps to integrate developing economies more

⁷⁰ Aitken, B.J., Harrison, A., 1999. Do Domestic Firms Benefit from Direct Foreign Investment?

⁷¹ OECD Economic Outlook No 81, May 2007

closely into international trade. A fuller access to trade is widely recognised to be one of the main sources of economic development.

- 2) Direct effects on the performance of the host country business sector.

The entry of foreign enterprises generally leads to productivity growth and enterprise development. This in turn can lead to enhanced competition -- particularly in previously shielded market segments.

- 3) Spillovers from foreign-owned to domestic enterprises. The presence of foreign-owned enterprises may lead to important spillovers of technology, human capital and other competences to the domestic enterprise sector. However, this effect may depend on whether the business sector of the host economy has reached a certain level of competences.

d) Environment and Employment: FDI also brings benefits in areas such as the environment and employment conditions. Evidences are there that foreign-owned enterprises in developing countries generally strive to perform above local standards. By being able to transfer state-of-the-art technology to developing countries, they can contribute to higher environmental standards and a better work environment. Loss-making enterprises may need to be restructured, with consequent loss of employment. Large foreign-owned companies may take dominant market shares, reducing competition. And the import and export activities of foreign-owned enterprises may lead to balance of payments volatility. But such "costs" are generally of short duration and can be corrected through appropriate host country policy measures.

The benefits of FDI do not occur automatically: policies in both host countries and home countries matter. Only enterprises that operate in a generally sound national and international environment can bring the full benefits of FDI to bear on the host economy. FDI tends to compound both the advantages and the disadvantages of a country's business environment. In this context, the report cites a number of specific challenges:

- **For host countries.** The essential need for a sound host-economy business environment applies equally to the case of attracting and benefiting from FDI. Transparency and the rule of law are listed among the top concerns of investors. Another important aspect is the size of the host economy, as evidenced by China's success in attracting FDI. Even small countries can boost the size of "their" market by pursuing policies of general openness to trade and regional trade integration.
- **For home countries.** Governments in the home countries of investors also have important roles to play. For instance, they need to take account of the consequences of their trade practices for a potential host country's ability to attract foreign investors.
- **For the enterprise sector.** Foreign-owned enterprises need to comply with high standards of corporate behaviour. OECD governments and other adherents to the OECD Declaration on International Investment and the OECD Guidelines for Multinational Enterprises work with business and civil society to enhance the positive contribution that foreign enterprises can make to economic development.

According to a new OECD publication, while FDI can entail drawbacks for host economies, the benefits that it brings generally outweigh the costs by a wide margin.⁷²

Role of FDI at Country and Investors Level:

Role of FDI at investor's level: A firm can decide to make a foreign investment because of many factors, including:

a) **Upstream integration**, by purchasing a provider, whose input will now be sold cheaper (or exclusively) to it or be differentiated along particular features;

b) **Horizontal integration**, by purchasing a firm making the same product, to expand its production, reduces costs, improving logistics;

c) **Downstream integration**, by purchasing a firm using or distributing its products, to get higher value added along the chain and to aggressively push distribution;

d) **Diversification**, by purchasing a firm doing somewhat different activities than the purchaser, to seize new opportunities.

Role of FDI at country level: A firm already exporting to a market can decide to make a FDI and build there a productive unit to reduce the transport cost and avoid tariff barriers. At country level, outflows of FDI are high when:

⁷² OECD Economic Outlook No 81, May 2007.

- firms have sound financial conditions but consider that other countries have more favorable investment conditions;
- the exchange rate is "high" in an historical perspective (e.g. after a re-valuation) so foreign firms are "cheap" and exports are braked - in this case FDI substitutes exports;
- the trade balance is positive, with exports higher then imports, since capital flows usually compensate the commercial flows;

Inflow of Foreign Direct Investments increases with the attractiveness of the country owing to series of factors in different proportions depending on the industry and the country: There are empirical evidence weakens the relationships between FDI and low wages. In macroeconomic terms, net inflow of FDI often occurs when the country has a trade deficit.⁷³

Benefits of FDI to host countries

Due to advantages of FDI all the countries either developed or developing one or transition economies and developed countries compete against one another in attracting foreign investors. There is general agreement about the positive impacts of FDI on the welfare of receiving countries. The benefits of FDI concerning the capital market, technology transfer, market access, investment opportunities and export promotion are among the factors attracting FDI inflows from a host country perspective.

⁷³ Aitken, B.J., Harrison, A., 1999. Do Domestic Firms Benefit from Direct Foreign Investment?

Capital: Multinational enterprises (MNEs) invest in long-term projects, taking risks and repatriating profits only when the projects yield returns.

Technology: Technology effects start cascading down investment flows drives a more rapid rate of technology development, diffusion and (sometimes) transfer and the rest depends on regime of policies of the host nation.

Increased Domestic Investment: Increase in FDI inflows were associated with a manifold increase in the investment by national investors.

Export Growth: FDI could be associated with export trade in goods, and the hosting country can benefit from an FDI-led export growth.

Specific Measures by Governments (of Host and Home Countries) to Promote Linkages

Technology upgrading	Training
Partnership with foreign affiliates. Incentives for R&D cooperation. Home country incentives. Promote suppliers' associations.	Collaborate with private sector on one-stop service. Support private sector training programs. Collaborate with international agencies.
Information and matchmaking	Financial assistance
Provide relevant information. Maintain updated electronic databases. Act as honest broker in negotiations. Support suppliers' audits. Provide advice on subcontracting. Sponsor fairs, exhibitions and conferences. Organize meetings and, visits to plants.	Legal protection against unfair contractual arrangements and other unfair business practices. Guarantee recovery of delayed payments. Indirect financing to suppliers through their buyers. Tax credits and other fiscal benefits to firms providing long-term funds to suppliers.

.	Co-finance development programs with private sector.
	Directly provide finance to local firms. Home country measures: <ul style="list-style-type: none"> • Two-step loans. • Using official development assistance

Source: UNCTAD, World Investment Report 2001

Role of FDI in Transition:

FDI is one of the main features of globalization and a key challenge facing both developed and developing countries is managing it as a force for global welfare. Some of the types of contribution of FDI to transition are:

- a) Helps in the establishment and rise of a private sector⁷⁴
- b) Increase the quality of the market economy
- C) Brings financial resources during capital-intensive transformation
- D) Brings structural change and export Competitiveness

a) Contribution to the rise of a private sector

a) Contribution to the rise of a private sector

FDI helps in the development of infrastructural facilities, technical know-how and hence the production of intermediate goods and finished

⁷⁴ World Investment Report (WIR) 2006

products. The increase in the number of varieties of intermediate goods leads to positive spillovers to the final goods sector. As a result financial markets

Allow the backward linkages between foreign and domestic firms to turn into FDI spillovers. And at initial or transition stages at local markets lot of private firms come up to take advantages of this advantageous on going changes in the market and the overall economy.⁷⁵ To be more precise the link between privatization and FDI can be summed up as:

- Cross-border M&As involving private firms only.
- Greenfield equity investment in cash.
- Equity investment in kind.
- Reinvested earnings
- Additional (subsequent) =investment.
- Intra-company loans.
- Participation in privatization
- Vertical linkages
- Spillovers

⁷⁵ OECD-CUTS Regional Roundtable of FDI in Transition Economies: Challenges. Policies and Good Practice 2001 (CUTS= Consumer Unity and Trust Society, India)

b) Contribution of FDI to the quality of the market economy: Due to reforms affecting world trade and increasing pace of globalization changes the face of FDI has changed and during the last decade it has fostered faster rate of growth through out the globe.

c) Brings financial resources during capital-intensive transformation : The past two decades were marked by the increasing role of FDI in total capital flows to developing countries but this change in the composition of capital flows has not come overnight. It come through more FDI inflows to Information Technology & telecommunication sector and other infrastructural facilities thus helping in:

. Elimination of inherited distortions & shortages

- Rise in productivity

- Lifting services such as IT & telecommunication and banking that were neglected before

- Contribution to transparency

- Correlation between FDI sales in privatization and transparency:

d) Structural changes and export competitiveness: This transformation has been the result of emphasis among policymakers in developing countries to attract more FDI. And this belief had come from the fact that FDI has several positive effects like technology transfers, cost-benefit gains and hence

productivity gains. This has brought transition for the developing and countries in the phase of transition with the introduction of new processes, methods & means of production, increase in managerial skills & technical know-how in the domestic market, technical advancement & international production networks and access to developed markets.

Other significant changes of this transition change are also remarkable such as:

- ❖ Employee ownership programmes.
- ❖ Management & technical skills buy-outs.
- ❖ Privatization sales to local strategic investors.
- ❖ Privatization sales through portfolio techniques.
- ❖ Restitution & transfer to local economy having cost-benefit and other economic advantages and hence the social security, employment, education etc.

Contribution of FDI to the quality of the market economy

- Elimination of inherited distortions (elimination of shortages)
- Rise in productivity
- Lifting services such as telecom and banking form neglect
- Contribution to transparency
- Correlation between FDI sales in privatization and transparency:

Significance and Impact on other variables

A country outflows of FDI means that it is paying money to access foreign productive capacity and technology. For a country, attracting an inflow of FDI is strengthening its global trade network and finance its developmental plans in terms of purchases of an existing firm (by acquisition or by merger, ("M&A")) or the foundation of a new legal entity who usually makes a green-field real investment (e.g. building a factory) in the foreign country. At country level usually in macroeconomic terms, net inflow of FDI often occurs when the country has a trade deficit and outflows of FDI are high when:

- firms have sound financial conditions but consider that other countries have more favorable investment conditions;
- the exchange rate benefits so foreign firms are "cheap" and exports are braked - in this case FDI substitutes exports;
- the trade balance is positive, with exports higher then imports, since capital flows usually compensate the commercial flows;

A. Financial variables: The equity capital from FDI generates an increase in total equity of the foreign economy. As an inflow of capital, FDI changes the balance of payment. Taking other things as constant FDI increases the official reserves of foreign currency provided significant flows of FDI are aimed to real investments (e.g. building a factory)

B. External trade and industrial variables: A particularly strong FDI concentrated in a short period of time (e.g. a purchase of a newly privatized big state company) can lead to a re-valuation of the currency exchange rate. If, instead, the production is exported, FDI boosts exports of the host country, providing it with foreign currency. Usually, in this case, foreign companies will import technology and raw materials and manpower. If the good produced in the host country is sold there, consumption composition will change, possibly with a loss in market shares of local producers and of foreign producers based abroad. If the product is new for the host country, it fills a gap and increases the variety of available goods, thus opening the path to higher productivity for industrial users and higher satisfaction for consumers. If FDI is targeted to green-field investment, employment will rise, possibly involving a Keynesian multiplier of income and consumption. If FDI is targeted to an acquisition of a large inefficient firm then possibly it will lead to initial losses and waves of dismissals and a rise of unemployment.

C. Knowledge and entrepreneurial variables: Usually foreign investing firms have higher productivity than local ones as they advance technologies and technical know-how. All this might generate knowledge spillovers to workers, as well as to local providers would be forced to adopt advance technologies. Thus FDI is forced in the "product life cycle" bringing product innovation, a new phase of cost control. In the perspective of a competition among countries to attract foreign investors, a low-wage, low-tax country attracts investments from abroad.

From all the above discussion we conclude that demand for **Indian** exports increases when its export prices fall in relation to world prices. Also the real appreciation of the rupee adversely effects India's export demand. Hence, inflation should be kept lower than major trading partners and reliance on flexible exchange rate be increased to ensure that the real appreciation of rupee is maintained. Export supply is positively related to the domestic relative price of exports and a higher domestic demand reduces export supply. This suggests that tight monetary and fiscal policies are necessary especially at the time of high growth to check domestic prices and demand pressure. Foreign investment appears to have statistically no significant impact on India's export performance although the coefficient of **FDI** variable has a positive sign. Similarly, there is no evidence to claim that the level of infrastructure has an impact on export supply. These results, however, must be interpreted with caution.

Both economic theory and recent studies have suggested that FDI has a beneficial impact on developing host countries. FDI facilitates technology transfer and creation of employment in the developing countries. Technology transfer includes not only scientific processes, but also organizational, managerial and marketing skills. The country, as a whole are able to use their resources more efficiently with the new technology. The benefits of FDI are not limited with technology transfer and creation of employment, it benefits to capital market, export increase and much more as well.⁷⁶

⁷⁶ Grossman and Helpman (1991, 1995) and Barro and Sala -i-Martin (1995, 1997)

Theories of FDI:

As Foreign Direct Investment (FDI) flows began to increase in volume from 1960s, there has emerged a corresponding economic literature on the theory of FDI. Before 1960 there was no stand-alone theory of FDI, and the FDI was modeled as a part of neoclassical capital theory, which neglected many important features of FDI. The new theories provide explanations to questions such as why Foreign Direct Investment occurs, when it takes place and where it locates. Here we discuss the relative merits of the theories, how they have been applied to explain contemporary global patterns of FDI and how they have been updated and adapted to explain the most recent boom in Foreign Direct Investment.

Hymer's theory of FDI (1960):

Till 1960s, explanations of FDI were confined to the standard neoclassical theory of capital movement, stating that capital moves from areas with low rates of returns to areas with higher rate of returns. Thus, FDI was treated in the same way as portfolio investment, and was seen to depend only on international differences in rates of interest and motivated by rates of return.⁷⁷ It was Hymer (1960), who saw flaws in the prevailing view that portfolio and

⁷⁷ Hennart, J. F., 'International Financial Capital Transfers: A Transaction Cost Framework', *Business History* (1994): 51-70.

2 Hymer, S. H. (1960): "The International Operations of National Firms: A Study of Direct Foreign Investment". PhD Dissertation. Published posthumously. The MIT Press, 1976. Cambridge, Mass.

3 Bain, J., *Barriers to New Competition*, Cambridge: Harvard University Press, 1956.

4 Teece, D. J., 'Multinational Enterprise, Internal Governance, and Industrial Organisation', *American Economic Review* (1985): 233-38.

direct investments were synonymous with one another.² In the analysis of the nature and causes of foreign investment, Hymer made a distinction between direct and portfolio investment. After ascertaining that differences in interest rates cause portfolio investments, but not direct investments, and that the industrial distribution of the latter is not significantly different from one country to another, as could be expected if their cause was solely differences in profitability, Hymer concluded that direct investments are capital movements associated to international operations of firms. Their goal is to keep control of production. This control allows either to suppress competition, or appropriate rents derived from advantages like skilled labour, cheap raw materials and access to capital markets or technology.

Hymer's theory of FDI draws its influence from Bain's (1956)³ barrier to entry model of industrial economics.⁴ Hymer begins by noting that there are barriers to entry for a firm wanting to set-up production abroad. These barriers are in the form of uncertainty, host-country nationalism and risk. According to Hymer given these barriers to international production, there could be two reasons as to why do firms engage in Foreign Direct Investment. First, the firm removes competition within the industry, by taking-over or by merging with firms in other countries. Second, the firm has advantages over other firms operating in a foreign country. Both reasons stress the importance of 'market

imperfections'⁷⁸ and underlying these the investors has direct control of the investment and are expected to increase its profit.

Vernon's Theory of FDI (1966):

One aspect which was left out by Hymer was when and where the specific advantages of multinational enterprise would be exploited.⁶ This was left to **Vernon (1966)** and his **product life-cycle theory**. Vernon argued that the decision to locate production is not made by standard factor-cost or labour-cost analysis, but by a more complicated process. In 1966, Ray Vernon developed a model built on the internationalization patterns of U.S. firms, of which there are two important features at that time: average income in US was highest in the world and it had relatively high labour costs as compared with most of the other countries. The combination of these two features leads to an environment where innovation occurs in order to meet the demands of the market, but where firms try to substitute capital for labour to reduce unit cost of labour.

According to Vernon, a product has a life cycle that has three main stages:

Stage One: Product development process.

Stage Two: Maturing product.

Stage Three: Standardized product.

⁷⁸ Dunning, J. h. and Rugman, A. M., 'The Influence of Hymer's Dissertation on the Theory of Foreign Direct Investment', *American Economic Review* (1985): 228-32.

⁶ Dunning, J. H., 'International Production and the Multinational Enterprise, (London: George Allen & Unwin, 1981).

⁷ Vernon, R., 'International Investment and International Trade in the Product Cycle', *Quarterly Journal of Economics* (1966): 105-6.

Vernon postulated that U.S. manufacturers would likely focus on innovations for the high-income consumers of their home market and/or labour-saving products, and that they would be highly likely to produce their new products in their U.S. factories, even if they owned factories abroad in lower-cost locations. Vernon reasoned that with new products, for which the optimum design was still unclear and the price sensitivity of customers relatively low, the home base was “a location in which communication between the markets and the executives directly concerned with the new product is swift and easy, and in which a wide variety of potential types of input that might be needed by the production units are easily come by”⁷

The innovating company, therefore, was likely to produce a new product first in its U.S. home market, for which the product had been originally designed. Over time, the product matured: a dominant design became accepted and production processes stabilized. Meantime, an export market would develop for the product in those markets where certain high-end customers welcomed the innovation and are willing to pay a premium for it. Over time, foreign demand would grow, as foreign markets advanced economically, and exports increased. Eventually, the firm would consider setting up manufacturing in its larger foreign markets. Vernon postulated that most managers are “myopic” -unlikely to incur the costs and uncertainties of moving production outside their home country unless pushed into doing so by a “triggering event” that threatens their export markets, such as the emergence of local competitors trying to move in on the market created in their country by the firm’s exports, or the threat of tariffs.

Once established in the larger markets, the offshore production facilities would serve local markets with local production, substituting for exports. The market would expand, since the price of the product would be reduced by local production (lower labour costs, the elimination of transport costs). Over time, this lower price would encourage the growth of markets in the less developed countries, which might well be served not from the home country factories but from the secondary factories. And as the product becomes standardized, the firm might well set up production in the most rapidly growing less developed countries, where economic growth has created new markets. Eventually, the home country itself is served by products manufactured offshore, either by the firm's own subsidiaries offshore, which take advantage of highly standardized production processes and low labour costs to reduce prices, or by local competitors in the "follower" countries that can emulate the by-now standardized production processes and take advantage of established and increasingly price-sensitive markets in the earlier-developing markets.

The product cycle of Vernon looks at a dynamic process of FDI in terms of why, when and where it occurs. It was the first attempt to integrate a locational dimension to the theory of FDI. Despite this progress, the analysis was mainly concerned with Foreign Direct Investment by the US, and although this was the main generator of FDI at that time, by the 1970s the dominant role of US had passed and the theory was lacking a truly international explanation.

Vernon's Theory of FDI (1979):

Vernon himself wrote a critique of his own model in 1979, suggesting that it was much less general than he had posited more than a decade earlier. But he suggested that it might well still apply to companies just beginning their international expansion, and for firms whose products involved high levels of experimentation and uncertainty early in the initial production runs. He suggested that it would also apply to firms in the rapidly industrializing countries such as Mexico, Brazil, and Korea, whose innovations, tailored to their home markets, might well find their most promising international markets in “the other developing countries that were lagging a bit behind them in the industrialized pecking order”⁷⁹

Caves Theory of FDI (1971):

Caves (1971)⁸⁰ expanded upon Hymer's theory of direct investment, and placed it firmly in the context of industrial organization theory. The importance of Caves work is that he linked Hymer's theory of international production to the then current theories of industrial organization on horizontal and vertical integration. Caves distinguished between firms that engage in horizontal FDI and those that undertake vertical FDI.

Horizontal FDI: According to Caves, a firm will undertake horizontal FDI if it either possesses a unique assets which others do not have or because of the adverse effects of tariffs on its exports. Both reasons are likely to result in FDI occurring in market structures characterized by oligopoly and product

⁷⁹ Vernon, R., 'The Product Cycle Hypothesis in a New International Environment', *Oxford Bulletin of Economics and Statistics* (1979): 225-267.

⁸⁰ Caves, R. E., 'Industrial Corporations: The Industrial Economics of Foreign Investment', *Economica*, 38 (1971): 1-27.

differentiation. Caves argues that both characteristics will be found in the markets with product differentiation, so that the firm can move into these markets at little cost. First, the knowledge about how to serve the market can be transferred with relative ease, and second, uncertainty about the value of the knowledge makes licensing unattractive. Overall, horizontal FDI is a feature of oligopolistic markets, where products are differentiated.

Vertical FDI: Caves also looks FDI occurring at a different stage of production but within the same industry, i.e. vertical foreign investment. The argument is that it occurs when firms seek to avoid strategic uncertainty, and erect entry barriers to prevent foreign firms from entering the market. Caves argues that the vertical FDI is more likely if profits in the foreign market are dependent on long-term prices and investment are large in size, which together ensures that market structure is characterized by few suppliers.

Altogether, Caves adapts Hymer's theory of entry barriers and firm-specific assets and embeds this in the industrial organization literature.

Caves theory of FDI (1982):

Caves (1982)⁸¹ further refined his theory, to encompass theories based on transaction costs and internalization.⁸² These theories arose in the 1970s, providing an alternative perspective to why firms produce abroad. Caves (1974a)⁸³ extended his theory to look at multi-plant enterprises and entrepreneurial resources. The multi-plant enterprise hypothesis states that in order to capture economies of scale beyond the single efficient-scale plant, firms become multi-plants in order to

⁸¹ Caves, R. E., 'Multinational Enterprise and Economic Analysis, Cambridge University Press, 1982.

⁸² Jetto-Gillies, G., 'International Production: Trends, Theories, Effects; Cambridge: Polity Press, 1992.

⁸³ Caves, R. E., 'Cause of Direct Investment: Foreign Firms' Share in Canadian and United Kingdom Manufacturing Industries', The Review of Economics and Statistics, 56 (1974a): 279-93.

reduce costs. The entrepreneurial resources view states that direct investment will occur in order to maximize the usage of the firm's entrepreneurial talent. This view implies that the firm will hold some intangible assets in the form of human capital.

Internalisation Theory of FDI:

In 1970s a further strand of the FDI literature began to emerge, known as the internalisation theory of FDI. It is based on Coase's theory of the firm (1937)⁸⁴, and examines the role that transaction costs play in the formation of organizations. The internalisation theories of FDI played an important role in developing and advancing the theory of FDI in the 1970s. The process of internalisation is developed to explain international production and FDI, and one of the leading proponents is Buckley and Casson (1976)⁸⁵. They present the MNE as essentially an extension of the multi-plant firm. Buckley and Casson note that the operations of firms, especially large firms, take the form not only of producing goods and services, but activities such as marketing, training, research and development, management techniques and involvement with financial markets. These activities are interdependent and are connected by 'intermediate products', taking the form of either material products or knowledge and expertise. If the markets for intermediary products are imperfect then an incentive arises for the firm to internalise these, provided the benefits exceed the costs. When it occurs across the national boundaries a MNE arises and hence FDI occurs. Buckley and Casson state, as firms search for and exploit knowledge to their maximum potential they do so in numerous locations, with this taking place on an

⁸⁴ Coase, R. H., 'The Nature of the Firm', *Economica*, 4 (1937): 386-405.

⁸⁵ Buckley, P. and Casson, M.C., 'The Future of the Multinational Enterprise' London: Macmillan, 1976.

international scale, leading to a “network of plants on a world-wide basis”. Thus, MNEs arise because they are in industries with incentives to internalise and where knowledge is an important intermediate product.

Locational Theory of FDI:

Buckely and Casson (1976) answer questions on why FDI occurs, but they neglect to answer where it occurs. A locational aspect to Foreign Direct Investment theories also began to emerge in the 1970s. It assumes that the firm specific and internalisation motives are given, so that it focuses on locational factors when analyzing why firms decide to set-up production abroad. Wheeler and Mody (1992)⁸⁶ place the main factors that determine the location of FDI into two categories; ergodic and non-ergodic systems.⁸⁷ An ergodic system always returns to its initial state when the exact conditions that led to the initial state are reproduced, but a non-ergodic system will never return to its initial state even if the initial conditions are reproduced. In non-ergodic system the role of history is important, as small changes will lead to irreversible outcomes.⁸⁸ Applied to the theory of FDI, ergodic system results in location being primarily determined by what are known as classical variables: geographical features, labour costs, transport costs and market size.

Both ergodic and non-ergodic systems can lead to the clustering of firms, which has been a focus for recent policy initiatives. However, only with non-ergodic systems will agglomeration economies arise, as the presence of other firms

⁸⁶ Wheeler, D. and Mody, A., ‘International Investment Location Decisions: The Case of US Firms’, *Journal of International Economics*, 33 (1992): 56-76.

⁸⁷ Arthur, W. B., ‘Industry Location Patterns and the Importance of History’, Center for Economic Policy Research Paper 84, Stanford University (1986).

⁸⁸ David, P. A., ‘Path Dependence, Its Critics and the Quest for “Historical Economics”’ in P. Garrouste, and S. Ionnides, *Evolution and Path Dependence in Economic Ideas: Past and Present* (Cheltenham: Edward Elgar Publishing, 2001), pp. 15-40.

contributes to the attractiveness of the area. Guimaraes (2000)⁸⁹ define agglomeration economies as, “economies that are external to a firm, but internal to a small geographic area”. Therefore, according to the non-ergodic approach, agglomeration effects become more important over time in attracting FDI compared to the classical variables such as labour availability and geographical endowments. It is these classical approach ergodic approach relies upon.

Modern Theories

The Theory of FDI: Five "W's" and an "H"

It helps to understand the theory behind foreign direct investment if one conceptualizes it as answers to the typical who-what-where-why-how questions:

- Who - who is the investor?
- What - what type of investment?
- Why - why go abroad?
- Where - where is the investment made?
- When - When does the firm choose to go abroad?
- How - How does the firm go abroad? What mode of entry into the foreign market does it choose? ⁹⁰

⁸⁹ Guimaraes, P., Figueiredo, O. and Woodward, D., ‘Agglomeration and the Location of Foreign Direct Investment in Portugal’, *Journal of Urban Economics*, 47, 1 (2000): 115-35.

⁹⁰ Griffin & Pustay, *International Trade & Investment Theory*

1. Who - who is the investor?

A new firm or an established MNE? An insider or an outsider?

2. What - What kind of investment?

Greenfield vs. Brownfield? Merger & Acquisition? First time investment or sequential investment?

3. Why - why go abroad?

Firm X wants to earn more profits either by raising its revenues or reducing its costs?

4. Where - where is the investment made?

Choice of host country location - affected by economic, social/cultural and political factors?

5. When - when is the investment made?

Timing of entry decision - affected by age of product, multinationality of firm. Product life cycle theory offers an explanation for the timing of FDI.

6. How - how does the firm go abroad? What mode of entry?

Choices include exports, licensing, franchising, FDI

The OLI paradigm provides a theoretical base for answering at least some of these questions.

B. The OLI Paradigm (a.k.a. the Eclectic Theory of FDI)⁹¹

The OLI paradigm was developed by John Dunning, professor emeritus at the University of Reading (UK) and Rutgers University (US). The paradigm is a blend of three different theories of foreign direct investment = O + L + I, each piece focusing on a different question.⁹²

- O = Ownership Advantages (Firm Specific Advantages): Ownership advantages address the WHY question [why go abroad?]. The WHY question hypothesizes that the MNE has one or more *firm specific advantages* (*ownership advantage*, *core competency*) which allows it to overcome the costs of operating in a foreign country. This firm specific advantage (FSA) is normally intangible and can be transferred within the multinational enterprise at low cost (e.g., brand name, benefits of economies of scale, technology). The advantage either generates higher revenues and/or lower costs that can offset the costs of operating at a distance in a foreign location.
- L = Location Advantages (Country Specific Advantages). Location advantages address the WHERE question [locate where?]. The motive to move offshore is to use the FSA in conjunction with factors in a foreign country. Through these factors (e.g. labor, land), the MNE makes profits (earns rents) on its FSAs. The choice of investment location depends on

⁹¹ International Business & Foreign Direct Investment (FDI), <http://faculty.washington.edu>.

⁹² Dunning, J.H., "The Electric (OLI) Paradigm of International Production: Post Present and Future", *International Journal of The Economics of Business*, 8.2 (2001 B); 173-90

a complex calculation that includes economic, social and political factors.

- I = Internalization Advantages. Internalization advantages address the HOW question [how go abroad?]. The MNE has various choices of entry mode, ranging from the *market* (arm's length transactions) to the *hierarchy* (wholly owned subsidiary). The MNE chooses *internalization* (the internal route) where the market does not exist or functions poorly so that transactions costs of the external route are high.

Let us look at the O - L - I paradigm in more detail:

Firm Specific Advantages (The O Factor)

A MNE operating a plant in a foreign country is faced with additional costs compared to a local competitor. The additional costs could be due to (i) cultural, legal, institutional and language differences; (ii) a lack of knowledge about local market conditions; and/or (iii) the increased expense of communicating and operating at a distance. Therefore, if a foreign firm is to be successful in another country, it must have some kind of an advantage that overcomes the costs of operating in a foreign market. Either the firm must be able to earn higher revenues, for the same costs, or have lower costs, for the same revenues, than comparable domestic firms.

PROFIT = TOTAL REVENUES - TOTAL COSTS - COST OF OPERATING
AT A DISTANCE

Since only foreign firms have to pay "costs of foreignness", they must have other ways to earn either higher revenues or have lower costs in order to be able to stay in business. So if the MNE is to be profitable abroad it must have some advantages not shared by its competitors. These advantages must be (at least partly) specific to the firm and readily transferable within the firm and between countries. These advantages are called *ownership or firm specific advantages (FSAs) or core competencies*. The firm owns this advantage: the firm has a monopoly over its FSAs and can exploit them abroad, resulting in a higher marginal return or lower marginal cost than its competitors, and thus in more profit. These advantages are internal to a specific firm. They may be location bound advantages (i.e. related to the home country, such as monopoly control over a local resource) or non-location bound (e.g. technology, economies of scale and scope from simply being of large size).

We identify three basic types of ownership advantages for a multinational enterprise. These include:

- *knowledge/technology*, broadly defined so as to include all forms of innovation activities;
- *economies of large size (advantages of common governance)*, such as economies of scale and scope, economies of learning, broader access to financial capital throughout the MNE organization, and advantages from international diversification of assets and risks; and

- *monopolistic advantages* that accrue to the MNE in the form of privileged access to input and output markets through patent rights, ownership of scarce natural resources, and the like.

Some of these O advantages can be found with *de novo* firms (i.e. first time overseas investments), others come from being an established affiliate in a large, far flung multinational enterprise. Economies of common governance clearly belong to the latter category. Therefore FSAs can change over time and will vary with the age and experience of the multinational.

Country Specific Advantages (The L Factor)

The firm must use some foreign factors in connection with its domestic FSAs in order to earn full rents on these FSAs. Therefore the locational advantages of various countries are key in determining which will become host countries for the MNE. Clearly the relative attractiveness of different locations can change over time so that a host country can to some extent engineer its competitive advantage as a location for FDI.

The *country specific advantages* (CSAs) that influence where an MNE will invest can be broken into three categories: E, S and P (economic, social and political). Economic advantages include the quantities and qualities of the factors of production, size and scope of the market, transport and telecommunications costs, and so on. Social/cultural advantages include psychic distance between the home and host country, general attitude towards

foreigners, language and cultural differences, and the overall stance towards free enterprise. Political CSAs include the general and specific government policies that affect inward FDI flows, international production, and intra-firm trade. An attractive CSA package for a multinational enterprise would include a large, growing, high income market, low production costs, a large endowment of factors scarce in the home country, and an economy that is politically stable, welcomes FDI and is culturally and geographically close to the home country.

Internalization Advantages (The I Factor)

The existence of a special know-how or core skill is an asset that can generate economic rents for the firm. These rents can be earned by licensing the FSA to another firm, exporting products using this FSA as an input, or setting up subsidiaries abroad. The ownership advantages of MNEs thus explain why they go abroad while the locational advantages of countries explain where MNEs set up foreign plants.

How they go abroad is another issue. The OLI model argues that external, arm's length markets are either imperfect or in some cases nonexistent. As a result, the MNE can substitute its own internal market and reap some efficiency savings. For example, a firm can go abroad by simply exporting its products to foreign markets; however, uncertainty, search costs and tariff barriers are additional costs that will deter such trade. Similarly, the firm could license a foreigner to distribute the product but the firm must worry about opportunistic behavior by the licensee.

The OLI model predicts that the *hierarchy* (the vertically or horizontally integrated firm based on internal markets) is a superior method of organizing transactions than the *market* (trade between unrelated firms) whenever external markets are nonexistent or imperfect. The theory predicts that *internalization advantages* will lead the MNE to prefer wholly owned subsidiaries over minority ownership or arm's length transactions. It is therefore the internalization advantages part of the OLI paradigm that explains why MNEs are integrated businesses, producing in several countries, and using intra-firm trade to ship goods, services and intangibles among their affiliates.

Internalization within the MNE is designed to reduce market failures by replacing missing or imperfect external markets with the hierarchy of the multinational organization. These market imperfections are of two basic types: natural and structural market failures.

Natural market imperfections are caused by failures in, or the lack of, private markets; these failures arise naturally in the course of market making. There are several general types of market imperfections that arise naturally in external markets. Two of the most important are imperfections in, or the lack of, a market for knowledge, and the existence of transactions costs in external markets. Other important market failures occur because of risk and uncertainty, and interdependence of demand and supply.

First, the *external market for knowledge may fail* due to three inherent characteristics: (i) transactions in knowledge suffer from impacted ness and

opportunism; (ii) uncertainty plagues this market; and, most importantly, (iii) knowledge is a intermediate good with strong elements of public ness. Because technology is intangible and firm specific, it is difficult for either the owner or the potential buyer to assess its value. The seller must explain to the buyer how it can be used without telling enough that the buyer could replicate the knowledge; hence, knowledge is impacted. This can cause opportunistic behavior as each party attempts to shift the terms in his/her favor. Impacted ness and opportunism are worsened by uncertainty, leading the buyer to underestimate the benefits. If both parties are risk averse, the private market under produces knowledge.

A second source of natural market failure are the *transactions costs* which are incurred in overcoming market imperfections or obstacles to trade in all external markets. The higher the costs, the smaller the volume of trade. All markets are faced with the costs of search, communication, specification of details, negotiation, monitoring of quality, transport, payment of taxes and enforcement of contracts. Transactions costs may be reduced if the two parties are jointly owned. For example, it may be difficult to conclude a long run, fixed price contract if comparable, external prices are not readily available since future price fluctuations will benefit one party at the expense of the other. If the two firms merge, the probability of making a market increases. In addition, quality control can be improved through backwards integration. Vertical integration to ensure quality control, for example, can be found in the

high quality, high priced end of the market (e.g. name-brand perishable produce such as Dole bananas and pineapples).

A third type of natural market failure arises because *external markets fail to deal adequately with risk and uncertainty*. Risk is the possibility of loss; risk aversion can be a motive for foreign direct investment. Under uncertainty, individuals can only make rational decisions within an area bounded by what they know. As a result, individuals with information not available to the other party may use this information to behave opportunistically, in order to improve their bargaining position vis-à-vis the other party. Internalization lessens the incentives for opportunistic behavior by buyers and sellers. It can also compensate for the lack of futures markets since individual units of an MNE are less concerned about future price changes within the MNE than are independent entities. Internalization therefore can provide a form of insurance against unexpected price changes, particularly in the long run and where futures markets do not exist to provide such a hedging cushion.

Structural market failures are due to MNE oligopolistic behavior arising from general exploitation of markets, or from arbitraging differences in government regulations between countries. Structural market failures are created by the multinational enterprise as it exploits its monopoly power in domestic and international markets. First, because multinationals, especially the largest ones, are powerful and mobile non-state actors in the global economy, their ability to move assets and incomes has been a constant bone of

contention with host country governments, especially developing countries (whose GDP may often be smaller than the global sales revenues of the biggest MNEs). Nation states fear that multinationals can and do abuse their relative bargaining power in ways that benefit the MNEs at the expense of host country citizens, businesses, and governments. For example, as members of an international oligopoly, MNEs can raise global profits by segmenting domestic markets and price discriminating, erecting entry barriers to limit competition from domestic firms, restricting the decision making and R&D activities of its subsidiaries by centralization within the parent firm, using transfer pricing to shift rents out of host countries, and so on. These are endogenous market imperfections, caused by the international oligopolistic nature of the MNE.

Second, when governments levy taxes, tariffs and other forms of trade barriers, these regulations create additional costs for firms that reduce profits. Although the regulations generally have a legitimate economic purpose (e.g. raising government revenue), from the firm's point of view these are exogenous factors distorting international markets. Unrelated firms trading across international borders must pay these taxes; however, MNEs can, through transfer pricing and other financial maneuvers, at least partly arbitrage these exogenous imperfections. These are *exogenous, government imposed market imperfections*. Where government regulations exist, integration can therefore reduce the regulatory burden on firms. MNEs can arbitrage government regulations such as tariffs or differences in tax rates. Ad valorem tariffs can be avoided by underinvoicing imports. If the profit tax rate is higher in one

country than another, tax payments can be reduced by overinvoicing intrafirm imports to, and underinvoicing exports from that country. The amounts and timing of head office fees, dividends, royalties can all be manipulated to reduce tax payments. Thus, the MNE through internalization can arbitrage exogenous market imperfections, in the process earning higher after-tax and tariff profits than can unrelated firms engaging in similar transactions.

Note, however, that even though there are benefits to internalization; there are also costs involved in being an integrated business. One of the most important of these is *governance costs*, that is, the costs of administering a large, vertically and horizontally integrated enterprise with its complicated internal markets for goods, services and intangibles. Secondly, integrated businesses, in order to compete on a global scale, also require enormous financial resources that may not be available to the firm or only available at a cost that is higher than that available through other forms of organizational structure, for example, through more loosely related structures such as business networks and strategic alliances. Thirdly, new lines of business may require core competencies or co-specialized assets not possessed by the MNE; rather than either forgo entering these areas or incur the costs of entry the firm may choose a looser contractual arrangement. The combination of high governance costs, inadequate financial resources, and missing FSAs or co-specialized assets may rule out vertical integration as a mode of entry or expansion, even where the wholly owned subsidiary route is the most preferred route for the firm.

This means that the choice between the market and the hierarchy is not so simple. There are many different modes of engaging in international production, ranging from simple exporting on the one hand, through subcontracting, licenses and joint ventures, to the polar extreme of a wholly owned subsidiary or branch. Each has its own benefits and costs to the MNE and these vary depending on the home and host countries, potential partners, the market for the product, government and non-governmental barriers to trade, and so on. The MNE compares the advantages and disadvantages of these various contractual arrangements. Generally, we expect that the MNE prefers the wholly owned subsidiary route to other contractual arrangements, unless the costs of governance (running the hierarchy) exceed the benefits of internalization (in terms of internalizing natural and structural market failures). This is illustrated by the horizontal line below, showing a variety of entry modes along the line.

exports	licensing	franchising	minority joint venture	MOFA	WOS
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We can think of modes of entry as along a line. On the left end is the 100% external market [exporting at arm's length between unrelated parties] where governance costs and the firm's control level should be very low but transactions costs high. At the other extreme is the 100% internal market, the wholly owned subsidiary [WOS], where governance costs and control are high but transactions costs are low. Moving from left to right, the modes of entry become more expensive in terms of commitment levels but offer more control.

Transactions costs should fall and governance costs rise as we move from left to right. The firm chooses its mode of entry, for a particular foreign investment at a particular point in time, from among the range of possible modes of entry. Note that the choice can change over time, and for different investments.

Summary: The OLI Paradigm

This is the OLI or eclectic paradigm explaining the existence of multinationals. The O factor answers the "why?" question; that is, why the firm goes abroad. The reason is to exploit its firm specific advantages in other markets and countries; these FSAs allow the firm to overcome the costs of transacting and producing in a foreign location.

The L factor answers the "where?" question of location. Since international production requires the use of foreign factors in conjunction with the firm's FSAs, the MNE chooses its where to locate its foreign operations by comparing each country's locational attractiveness in terms of country specific, social/cultural, and political factors.

The I factor answers the "how?" question as to what mode of entry the firm uses to penetrate the foreign location. The MNE has a variety of alternative contractual arrangements, ranging from arm's length international trade through the wholly owned foreign subsidiary, and weighs their relative benefits and costs to determine how the enterprise enters the foreign market and expands its operations over time.

The successful MNE simultaneously combines these ownership, location, and internalization advantages to design its network of activities and affiliates in ways that maximize its market shares and growth. Now let us look at one example of how the OLI model can be applied to a particular industry in order to provide some concreteness to this theory.

Mainstream Theories, Hypothesis and Schools of Thought on FDI: Theories of Industrial Organization

Macro Theories			Micro Theories	
Theory/hypothesis	Authors	Main tenet	Theory/hypothesis	Authors
Main question addressed: Why are firms of one nationality able to penetrate (through FDI) the value added territory of firms of another nationality?				
			Theories of Industrial organization ^{C,D}	Hymer (1960, 1968, 1976) Caves (1971, 1974) Teece (1981, 1992) McCullough (1991)
				Hymer was the first to systematically analyze issues related to the advantages of TNC's, market imperfections and control in foreign markets with the successful competition between domestic producers and foreign firms (Singh and Jun, 1995 and Jenkins and Thomas, 2002:5) TNC's investing in foreign markets are, compared to local firms, faced with certain additional risks and costs in terms of knowledge of local market conditions, cultural, institutional and linguistic barriers and communication and transport costs (Hansen, 1998: 24). Firms that want to invest through FDI in these foreign markets must have specific advantages to gain a competitive edge on local firms in a foreign or destined country. These include advanced technology; R&D capabilities, superior managerial, administrative and marketing skills access to low-cost funding; and interest and exchange rate differentials (Jenkins and Thomas, 2002).

^C Lizondo, J.S. 'Foreign direct investment – determinants and systems consequences of international capital flows'. Occasional paper 77, March 1990. A study by the research department of the international monetary fund.

^D 'A Rose by any other Name.....? FDI theory in retrospect and prospect', Journal of International Business Studies, <http://copendagen-jibs.net/lit.reviews/lityeararchives.asp>.

Mainstream Theories, Hypothesis and Schools of Thought on FDI: Theories of the Firm

Macro Theories			Micro Theories		
Theory/hypothesis	Authors	Main tenet	Theory/ hypothesis	Authors	Main tenet
<p>Main question addressed: Why (and how do) firms expand their territorial boundaries outside their home countries?</p> <p>Product cycle, ^A</p>	<p>Vemon (1966) Hirsch (1967) Vemon (1979) Buckley and Casson (1976)</p>	<p>This hypothesis offers an explanation for both FDI and international trade and focuses on the different stages that a product goes through. In the initial or first stage a new product is developed and produced by the innovating firm in its home country. The second stage is marked by product maturity and an increase in exports of products to higher income countries. Increased demand and growing competition in local markets lead eventually to FDI. The third stage is characterized by a complete standardization of the product and its production technique, which is no longer in exclusive possession of the innovator (Agarwal, 1980: 751.)</p>	<p>Transaction related ^D</p>	<p>Coase (1937) Buckley and Casson (1976) Williamson (1975, 1979) Rugman (1981) Hennart (1982, 2000) Hill and Kim (1988) Prahalad and Doz (1987) Barlett and Ghoshal (1989) Doz, Awakawa, Santos and Williamson (1997)</p>	<p>A number of authors have developed their own extension of Coase's classical theory of transaction cost analysis. This includes the rationale and nature of firms in transferring business internationally. Williamson (1975) views the TNC's extension as a hierarchical response to market imperfections in international markets for goods and services. The theory posits that there are economic advantages for a firm in establishing a wholly-owned subsidiary (WOS) through FDI (Hill and Kim, 1988: 94).</p>
<p>Internationalization process ^D</p>	<p>Johanson and Vahlne (1977, 1990) Eriksson, <i>et al</i> (1997)</p>	<p>Internationalization is defined as the process of increasing involvement of TNCs in international operations (Edwards, 2003: 28). The internationalization process is in some sense related to the internalization and knowledge enhancing theories. Firms' knowledge of local and foreign markets different and only firms that are successful in their internationalization process, with their accumulated knowledge will benefit from their accumulated experience. Only those firms with enough knowledge will survive in the international markets.</p>	<p>Resource based ^D raw materials</p>	<p>Penrose (1958) Wenerfelt (1984) Nelson and Winter (1982) Cantwell (1989, 1994) Teece, Pisano and Shuen (1977).</p>	<p>Investors according to this theory, invest abroad to secure a more stable or cheaper supply of inputs. These generally include raw materials and energy sources, but also another factors of production (Jenkins and Thomas, 2002:6).</p>
			Strategy related	Vernon (1966)	Knickerbocker (1973) introduced the

			^D and Oligopolistic production ^A	Knickerbocker (1973) Graham (1975) Flowers (1976) Vernon (1982) Hostman and Markusen (1987) Graham (1990, 1998).	nation of oligopolistic reaction to explain why firms follow rivals into foreign markets. This includes oligopoly behaviour as well as uncertainty and risk aversion to establish the conditions required to generate "follows the leader" behaviour.
			Option theory D	Kogut and Kulatilaka (1994) Rivoli and Solara (1996) Casson (2000)	Option theory relates to hypothesis regarding the effects of uncertainty, differences in technologies and the threat of pre-emptive rivalry. It is based on the idea that FDI is subject to uncertainties ranging from factors in the macro-economic environment, such as political and economic fluctuations and foreign exchange rate volatility, to those in the micro-economic environment, such as uncertainties regarding local market demand and partners' opportunistic behaviours in just ventures. Furthermore, in evaluating FDI, cash flows need to be considered as well as managerial flexibility.
			Internalization ^A	Buckley and Casson (1976)	Markets for key intermediate products such as human capital, knowledge, marketing and management expertise are imperfect, mainly because of a lack of information. As a result of this, linking different international activities through these markets involves significant time lags and transaction costs. Firms are encouraged to infiltrate these foreign markets using their own

					product. This entering of firms across national boundaries to gain access to international markets leads to FDI. This process is continued until the benefits and costs of further internalization is equalized at the margin. Benefits include: avoidance of time lags, bargaining opportunities (because of the firm's involvement in the foreign market) and a decrease of buyer uncertainty. This impact of government intervention through transfer pricing and the ability to use discriminatory prices are also minimized (Agrawal, 1980: 753).
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A From Agarwal (1980)
D From Dunning (2002)

Mainstream Theories, Hypothesis and Schools of Thought on FDI: Theories of Trade

Macro Theories			Micro Theories		
Theory/hypothesis	Authors	Main tenet	Theory/ hypothesis	Authors	Main tenet
Main question addressed: Why do firms engage in FDI rather than trade; and how does FDI effect existing trade theories?					
Macro (country oriented) ^D	Kojima (1973 to 1982) Helpman (1984, 1985) Markusen and Venables (1998)	International trade economics did not originally provide an explicit explanation for FDI, but interpreted the Heckscher-Ohlin model and devised a theory on FDI called the 'factor proportional theory of capital movements'. According to this theory, factors would move whenever the marginal product of the factor in one country exceeded the marginal product in another by more than the cost of movement. The location of specific operations would be determined by the traditional tenets of comparative advantages making allowance for various frictions such as transport cost or government policies (Hansen, 1998:7). Kojima mentioned two types of FDI: trade-oriented and anti-trade oriented. FDI is trade oriented if it generate an excess demand for imports and an excess supply of exports at the original terms of trade. The opposite occurs if FDI is anti-trade oriented (Lizondo, 1991: 86).	Micro (firm industry oriented) ^D	Vernon (1996) Hirsch (1976) Ethier (1986) Batra and Ramachandran (1980) Gray (1982 and 1999) Markusen (1984, 1995, 1998)	Traditional trade theory of comparative advantages suggests that the basis for trade lies in differences in economic structures. Trade should thus be the greatest between countries that are economically dissimilar. Trade should also cause a country to export goods in which it has a comparative advantage in producing and to import those goods that are different from what it produces and exports. International investment can be viewed as a transfer of part of one country's endowment or competitive advantage to its trading partner. Hence, international investment should be stimulated by differences in factor endowments. Partial equilibrium or micro-analytic approaches are mainly used to understand what the multinational firms 'do', how they operate in foreign markets and what their impact is on competitive conditions in other markets.

^D From Dunning (2002)

Mainstream Theories, Hypothesis and Schools of Thought on FDI: Theories of Location

Macro Theories			Micro Theories	
Theory/hypothesis	Authors	Main tenet	Theory/hypothesis	Authors
What determines where firms locate their value added activities?				
Theory of location ^p (general)	Vemon (1966) Hirsch (1967) Dunning (1972) Vemon (1974) Root and Ahmed (1979) Davidson (1980) Lipsay and Kravis (1982) Krugman (1991, 1993)	This theory deals with the reasons determining the choice of host country for overseas investment (Jenkins and Thomas, 2002:5.) The determinants include access to local and regional markets, availability of comparatively cheap factors of production, competitive transportation and communication costs, the opportunity to circumvent import restrictions and investment incentives offered by the host country (Jenkins and Thomas, 2002: 6).	Clustering and agglomeration ^p	Enright (1991, 1998) Porter (1998) Audretsch (1998) Chen and Chen (1998) Head, Ries, and Swenson (1995) Markusen and Venables (2000)
Internationalization ^p	Johanson and Vahlne (1977, 1990) Schneider and Frey (1985) Welch and Luostarinen (1988)	The internationalization theory includes a large position of behavioural approaches. They argue that internationalization is a logical sequence of increasing international commitment by gradually gaining foreign market knowledge. These schools of FDI are especially concerned with market entry and location strategies in foreign countries. Johanson <i>et al</i> (1977) summarize four different modes when engaging with foreign markets (successive stages represent higher degrees of international involvement): Stage 1 – no regular export activities; Stage 2 – export via independent agents; Stage 3 – establishment of an overseas	Knowledge enhancing ^p	Cohen and Levinthal (1990), Levinthal (1990), Kogut and Zander (1992, 1994) Nonaka (1994) Porter (1994, 1998) Dunning (1995, 1997) Kuemmerle (1999)
				TNC's and firms tend to cluster together to generate economies of scale, like in Silicon Valley in the USA, where all the large computer hardware and software companies have established their production facilities and head offices
				Knowledge enhancing and sharing is seen as a determinant in improving a firm's capabilities (this has also been discussed in the literature on organization theory) (Cohen and Levinthal 1990m Kogut ad Zander 1992, Nonaka (1994). Kogut and Zander (1992) argue that the competitive advantage of a firm is derived from the ability of its members to create and share knowledge efficiently. They conceptualize the firm as a repository of socially constructed knowledge that is a product of the firm's accumulated experience. The speed of knowledge creation and transfer is a fundamental determinant of

		Stage – sales subsidiary; 4 overseas production / manufacturing units.			the firm's rate of growth and competitive position. This also implies that firms that have the ability to create knowledge faster will be better equipped to adapt and invest, by means of FDI, in foreign countries. The existence of shared language, coding schemes and organizing principles, facilitates the firm's ability to create and transfer knowledge. In addition, underlying dimensions of knowledge, such as, its complexity and communicability, also influence the ease with which knowledge is transferred in a firm (Zander and Kogut 1955).
Market size ^{A,B}	Stevens (1969) Kwack (1972) Schwartz (1976)	The market size hypothesis is applied on the macro level, but microeconomic linkage exist between FDI and output that have their roots in the Theory of Domestic Investment. A large market or an increasing market size will create opportunities for increased profits and this will attract increased levels of domestic and foreign investment. Jorgenson (1963) for instance uses a model of profit maximization and a Cobb Douglas relationship between domestic investment and output in a neoclassical framework (this is a generalized form of a flexible accelerator model by Chenery (1952) and Koyck (1954)).	Output	Stevens (1969) Kwack (1972) Schwartz (1976)	According to Agarwal (1980: 746) output and market size are practically two sides of the same coin. The output hypothesis is applied at the micro level and assumes a positive relationship between FDI of a firm and its output (sales) in the host country. The objectives for these foreign firms investing through FDI in a country is to maximize profit or maximize output given the cost of capital and labour.
Exchange rated ^D /currency area ^A	Alibar (1971) Cushman (1985) Culem	Traditional views are that exchange rate movements should not affect FDI flows because if an asset in particular country is	Spatial transaction D	Florida (1995) Scott (1996) Storper and Scott (1995)	In territorial innovation models, it is argued that proximity leads to reduced transaction costs. An increased number

	(1988) Froot and Stein (1991) Rangan (1998)	viewed as a claim to a future stream of profits denominated in that country's currency and if profits are converted back to the domestic currency of the investor at the same exchange rate, the level of exchange rate does not affect the present discounted value of investment. On the other hand, "common sense" points to the fact that foreign firms are more firms are more willing to buy a asset when that country's currency is weak.			of external transactions lead to higher costs. In such circumstances the economic value of proximity has a lowering effect on transaction cost. In innovative trajectories it is impossible to anticipate all possible contingencies beforehand. Agglomeration (like in Silicon Valley, or car manufacturing in Detroit) is an outcome of the minimization of transaction costs and a reason of TNC's of a specific industrial sector to cluster together.
			Taxes subsidies and /or tariffs and incentives ^A	Hines (1996) Devereux and Griffith (1996) Haufler and Wooton (1999) Glass and Saggi (2000)	A host countries policies and institutions can play a prominent role in creating an environment for foreign firms to invest in the country. A high tariff, for example in the host country, may contribute very substantially to the host country's location advantage for an import substituting industry (Gastanaga <i>et al</i> 1998: 1301)
			Cheap labour A	Riedel (1975), Donges (1976, 1980) Juhl (1979)	As far as developing countries are concerned, the availability of cheap labours as a determinant of FDI flows has attracted much attention since the 1970's.

^A From Agarwal (1980)

^B According to Lizondo (1991) these theories assume perfect markets

^D From Dunning (2002)

Mainstream Theories, Hypothesis and Schools of Thought on FDI: Theories of FDI

Macro Theories			Micro Theories		
Theory/hypothesis	Authors	Main tenet	Theory/ hypothesis	Authors	Main tenet
Main question addressed: What explains the extent to which firms finance their foreign activities by equity capital exports from their home country? What determines the location of such FDI?					
Risk uncertainty ^D	Rugman (1975, 1979) Agmon and Lessard (1977) Lessard (1982) Rivoli and Salorio (1996) Rangan (1998)	Although dependence on foreign suppliers is usually thought to increase the risk of adverse exchange rate movements, supply disruptions or even expropriation, FDI can also serve to reduce and diversify risk. Dual or multiple sourcing of companies from different countries reduces the risk of supplies being disrupted due to political or labour causes. By moving components of a firm abroad to the markets it used to export to, a firm can reduce its exposure to volatile exchange rates.	Portfolio diversification hypothesis ^{A,B}	Iverson (1935) Tobin (1958) Markowitz (1959)	Investors do not only consider the rate of return, but also the risk in selecting their portfolios. Investment is a positive function of the former and a negative function of the latter (Agarwal, 1980: 744).
Exchange rate/ market imperfections	Aliber (1971) Cushman (1985) Frost and Stein (1991) Blonigen (1997) Rangan (1998)	Foreign firms are more willing to buy a country's asset when that country's currency is weak. Blonigen (1997) supports this argument by saying that exchange rate movements may affect acquisition because they involve firm-specific assets, which can generate returns in currencies.	Differential rate of return ^{A,B}	Popkin (1965) Hufbauer (1975)	This is the first neoclassical model to explain FDI flows, with the basic idea that investors want to maximize their profit by equating their marginal revenue and marginal cost. FDI is a function of international differences in rates of return on capital investment. FDI flows out of countries with low return to those expected to yield higher returns per unit of capital (Agarwal, 1980: 741 and Van der Walt, 1997: 23). The rate of return can be expressed as the ratio of profit to capital stock and profit is defined as the difference between total revenue and total cost. The share of FDI in a specific country will depend on the total revenue and the total cost as well as on the probability distribution of

Liquidity ^A	Stevens (1969) Stevens (1972)	This hypothesis attempts to apply the liquidity theory of domestic investment to FDI and seeks to establish a positive relationship between internal cash flows or liquidity and investment outlays of a firm (through FDI). This is based on the assumption that the cost of internal funds is viewed by investors to be lower than the cost of external funds (Agarwal, 1980: 755).	Behavioral ^A	Cyert and Mach (1963) Aharoni (1966)	the rate of return in the host and the home countries. The have argued that the three factors of fundamental importance in initial investment decisions are: uncertainty, information and commitment. Managers of a firm tend to overestimate the risk and uncertainty involved in foreign investments; therefore there must be some sort of initial force or forces which impel management consider the possibility of investing abroad. The initiating forces may be external or internal, such as strong interest rates or one of several high-ranking executives inside the organization for a particular FDI (Agarwal, 1980: 750).
Radical view Dependency school	Marx	This school flourished between the 1960's and 1980's and tried to achieve more equal wealth, income and power distributions through self-reliant and collective action of developing nations. It emphasized changes in the international division of labour and argued that the growing presence of TNC's in the global economy "launched the Third World" on a dead end route of dependent capitalism (Hansen and Wilhelms 1998:10). The school of thought believes that TNC's exploit poorer countries through FDI and therefore hamper opportunities self-development.			

^A From Agarwal (1980)

^B According to Lizondo (1991) these theories assume perfect markets

^D From

Dunning

(2002)

Conclusion:

Foreign direct investment (FDI) plays an extraordinary and growing role in global business. It can provide a firm with new markets and marketing channels, cheaper production facilities, and access to new technology, products, skills and financing. For a host country or the foreign firm which receives the investment, it can provide a source of new technologies, capital, processes, products, organizational technologies and management skills, and as such can provide a strong impetus to economic development. It can also relax potential Balance of Payment constraints on growth as a source of foreign exchange. Proponents of foreign investment point out that the exchange of investment flows benefits both the home country (the country from which the investment originates) and the host country (the destination of the investment). Opponents of FDI note that multinational conglomerates are able to wield great power over smaller and weaker economies and can drive out much local competition. The truth lies somewhere in the middle.

Chapter-3

Significance of FDI to Indian Economy

SIGNIFICANCE OF FDI TO INDIAN ECONOMY

As FDI contributes to over-all economic development both developing and developed countries are competing to attract global FDI flow to their economies and are trying attract FDI by offering incentives like tax concessions, tax holidays, and tax credits and export subsidies and import entitlements. These incentives targets to attract the FDI and to direct it to the desired sectors to yield the maximum benefit from it.

Foreign Direct Investment (FDI) is not seen just as a mere source of foreign capital but its role is extended much further than that. FDI promotes international trade and transfer of knowledge, skills and technology. As FDI brings expertise and managerial skills to the host economy they can be used to accelerate its industrial development. It also has the potential of transforming the economy and facilitating its integration into the global economy. Foreign investment can supplement domestic investible resources in a developing economy, enabling higher rate of growth. It can also relax potential balance of payment constraints on growth as a source of foreign exchange. Besides, the presence of foreign firms reduces market concentration and promotes a more competitive market structure.

Compared with other forms of international capital flows, Foreign Direct Investment (FDI) has been a relatively stable source of capital for many Asia economies, for this reason FDI flows are usually preferred over the other form of international finances. What makes FDI more attractive is that they are non-debt creating, and are of non-volatile nature. Unlike portfolio investment, it is

almost of permanent nature and their return depends on the performance of the projects financed by the investors unlike the inflexible repayment obligations of foreign debt. This risk-sharing feature makes foreign equity preferable to foreign debt.

In this Chapter an attempt has been made to analyse the Significance of FDI and for the purpose we have divided the chapter in 4 parts

- I) Dimensions of Reforms since 1991
- II) Analysis of different routes through which FDI comes in India
- III) Trends of FDI
- IV) FDI inflows in India vs Some Asian Countries

Dimensions of Reforms since 1991

Faced with twin crisis of unmanageable balance of payment and socio-economic crisis⁹³ and high rate of inflation build up in the 1980s and 1990s India launched its market-oriented economic reform in 1991 within the framework of liberal economic reforms. This strategy of accelerated rates of economic growth and making India a competitive efficient economy in the global marketplace through liberalization⁹⁴ opened the gate of FDI and foreign investors especially the private sector even in those sectors being reserved for public sector only.

⁹³ For details of magnitude and diagnosis of causes of this economic crisis, see Charan D Wadhva, "*Some Problems of India's Economic Policy*" (New Delhi: Tata McGraw Hill, 2ed 1977);

⁹⁴ Charan D Wadhva, *Economic Reforms in India and the Market Economy* (New Delhi: Allied Publishers, (1994), Ch. II.

Owing to the liberalization India achieved a break-through from the last two decades of low economic development. In 1970's there was hardly any FDI in India with many firms withdrawing from the Indian market. Even in 1980's FDI inflow was very nominal (less than \$ 0.2 billion per year from 1985-90). However after liberalization of the economy in 1990's FDI flows have shown an upward trend. FDI is nowadays perceived as a catalyst to stimulate development, growth, and to create new resources. Liberalisation and FDI have created new opportunities for economic development and competitive growth of local firms in India¹ and has become the most important source of contribution to domestic investment. Especially where domestic resources are insufficient to steer a country towards the path of its long-term potential growth, the role of foreign investment becomes indispensable.⁹⁵

Despite of lot of reforms and strategic policies India lagged behind China and some other Asian perhaps the principal problem remains in boosting its rate of saving and investment from the current about 23% of GDP to over 30% of GDP in order to make growth prospects take a quantum jump (real GDP growth rate of 8% or higher as envisaged in the 10th Five year Plan) and become comparable with the high growth phases of the Chinese and other Asian economies.

⁹⁵ Montek S Ahluwalia, 'India's Economic Reforms: An Appraisal' pp.26-27 published in India in the Era of Economic Reforms, edited by Jeffrey Sachs and Nirupam Bajpai. Oxford, 1999.

Certain revolutionary changes that changed the face of India in the eye of foreign investors and that stimulated exports and investments, showing results progressively by bringing the advantages of FDI to India are listed:

- a) FDI was allowed not in both the domestic and international market
- b) FDI was allowed for exports;
- c) investment ceilings were raised,
- d) policy environment and procedures were significantly simplified and streamlined,
- e) Signing many bilateral investment and trade agreements
- f) Double taxation treaties with different countries
- g) Elimination of many quotas, reduction of customs duties.
- h) FDI is freely allowed in many sectors⁹ with automatic approval
- i) On top of that, intellectual property rights are guaranteed.
- j) Since November 2005, FDI is allowed up to 100% in most activities under the automatic route
- k) FDI inflows were stimulated in industry and services, so benefiting from the many comparative advantages of the country (human resources, emerging market).

The major highlights of the economic reforms during the first five years of Liberalisation & globalisation of the Indian economy can be briefed into four broad areas:⁹⁶

⁹⁶ Montek S Ahluwalia, 'India's Economic Reforms: An Appraisal', *Ibid.*, pp.26-27.

1) Macro-economic management reforms.

2) Socio-Economic reforms.

3) Political and structural reforms

4) Specific sector oriented reforms

S.No	Area of reforms	Aims & Objectives	Results & Action Taken
1	Macro-economic mgmt reforms focused on reducing the fiscal revenue deficits.	a) Attempts were made to reduce the fiscal deficits and correcting the Balance of Payment	i) Reduction of Public investment Expenditure
			ii) Reduction of Public Expenditure on social welfare services
		b) Tax reforms: Efforts were made for improving the efficiency of tax administration.	i) Services were included in tax base
			ii) Rates of direct taxes for both individuals and corporates
			iii) Abolition of Export Subsidies with exceptions
			iv) Reduction on import duties
2	Socio –economic reforms	a) Amendment in Socio-economic policies	i) Infrastructural Sector Policies
		To achieve socio-economic growths investments were made in farms & irrigation, roads, power & industry.	ii) Amendment in Trade policies

		<p>Work was done on reducing population growth and since the annual rate of population growth has slowed significantly to nearly 1.8 percent during the 1990s, per capita income has been growing at a healthier real rate of four percent per annum The Planning Commission has set a poverty ratio target of 19.3 percent by the end of the Tenth Plan period (to March 2007)⁹⁷</p>	iii) Changes in Agro-economic policies
3	Political & Structural reforms	<p>a) State governments were given certain areas of planning. The strategy for equity and social justice consists of making agricultural development a core element of the Plan, ensuring rapid growth of those sectors which are most likely to create gainful employment opportunities and supplementing the impact of growth</p>	Best illustrated with the goals and the strategies in India's Tenth Five-Year Plan (2002-07).

⁹⁷

Tenth Five Year Plan, 2002-07 (in three volumes) (New Delhi: Planning Commission, 2002).

		b) Structural changes of certain policies	i) Amendment in Industrial Policy
		c) Technology transfers were also made easier by removing many mandatory approval requirements.	ii) Changes in Divestment and Privatization policies
		d) Restrictions on foreign collaborations investment (both financial and technological) were by and large removed	Another measure to bring in FDI was reduction of controls on technology and royalty payments..
4	Specific sector oriented reforms	Sector specific policies for economic development	i) Encouragement to private investment in specific sectors
		Financial Sector reforms	(Export) Economic Zones were set-up
		Agriculture sector	Reduction in subsidies on Fertilizers & foods

Abstracted from Economic-Survey (2002-03) Govt of India

Inspite of lots of opposition the government has allowed 100 per cent FDI in exiting airports, coal and lignite mining, laying of natural gas pipelines and various other sectors including alcohol, manufacturing of industrial explosives and hazardous chemicals, cash-and-carry wholesale trading and mining of diamond and precious stones will be also to invest 100 per cent through the automatic route. The government has also issued guidelines for the

FDI in single brand retail sector and has already permitted multinational companies to offer multiple products with prior government approval.⁹⁸

II) ANALYSIS OF DIFFERENT ROUTE THROUGH WHICH FDI COME IN INDIA

In the post reform period 1991-2007 and in the liberalised economy FDI comes through four routes:

- a) Government (SIA/FIFB) route or Non-Automatic route
 - b) RBI (Automatic Route)
 - c) NRI's Investment,
 - d) Acquisition of Share
-
- (a) Government (SIA/FIFB) route or Non-Automatic route such schemes require clearance on a case by case basis and are referred to Foreign Investment board (FIPB) for project clearance.
 - (b) RBI (Automatic Route) With the increase liberalisation, equity caps on FDI now exists only in limited sectors. Under this route the companies can issue shares upto the limit of foreign equity capital prescribed to foreign investors but with 30 days prior notice to RBI. Some of the major ones are:

⁹⁸ Tribune News Service New Delhi, February 14 2007.

S.No	Industry / Sector	Equity Caps
1	Broadcasting	20-49%
2	Insurance	Automatic but licence from IRDA is must
3	Defence Production	26% Prior government approval is must
4	Print Media	26%- Public sector 100- Private sector
5	Domestic air-services	40%
6	Telecommunications	49%
7	Advertising & Film production	74% Advertising 100%- Films
8	Drugs & Pharma	100%
9	Power Roads & Transport / Housing & Real Estate	100%
10	Petroleum	51-100% (100% vide Press note ⁴ dt Feb 10 2006)
11	Non-Banking Finance Companies	51-75%
12	Mineral	50% - Three industries relating to mining of iron ores or metal ores & non-metallic minerals. ⁹⁹

Source: SEBI & Corporate Laws, VOL XV, Part 5, date: March 1999

- (c) NRI's Investment : there are certain permissible limits for NRI investment in each sector
- (d) Acquisition of Share (Included as part of FDI since the 19996 u/s 296 FERA 1973 (currently it is u/s 5 of FEMA 1999) FDI proposal for acquisition of shares are considered only if the applications are made by Indian companies or it is approved by Board Resolution of Indian company.)

The reason for increase in Automatic route taking such a big leap in 2006-2007 is the changes in FDI policy during the year 2006-2007 vide Press

⁹⁹

Annexure III, Statement of Industrial Policy 1991, Press note 10 (1992 series); 24th July 1991.

note 4 dated February 2006. We could also see in the Table 1 that in 2007 so far all the FDI routed through automatic route. Some of the major initiatives taken recently are:

Change of route- Setting up of Greenfield airport projects, laying natural gas / LPG pipelines, cash and carry warehouse trading and export trading, brewing of alcohol, manufacturing of industrial explosives, hazardous chemicals, market study and formulation and investment financing in the petroleum sector

Increase in equity caps: FDI caps have been increased to 100% and automatic route extended to coal & lignite mining, setting up infrastructure relating to marketing in petroleum and natural gas sector and exploration and mining of diamonds and precious stones.

FDI in new activities: FDI has been allowed upto 100% in power trading, processing and warehousing of coffee and rubber. FDI is also allowed now upto 51% for 'single brand' product retailing but after prior Government.

Removal of restrictive conditions: Mandatory divestment conditions for business and e-commerce has been removed.

Procedural simplifications: The transfer of shares from resident to non-resident including acquisition of shares in an existing company has been placed on the automatic route subject to sectoral policy of FDI.

FDI INFLOW RBI'S REVISED DATA

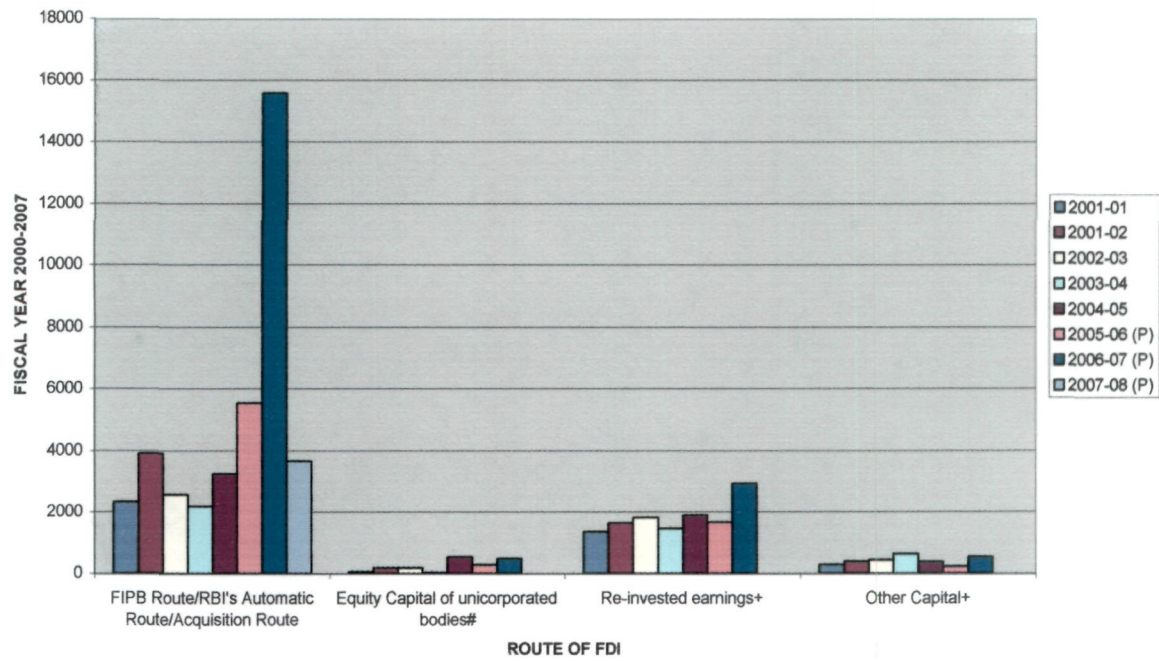


Fig 3.1

FDI INFLOW RBI'S REVISED DATA FROM 2000-2007

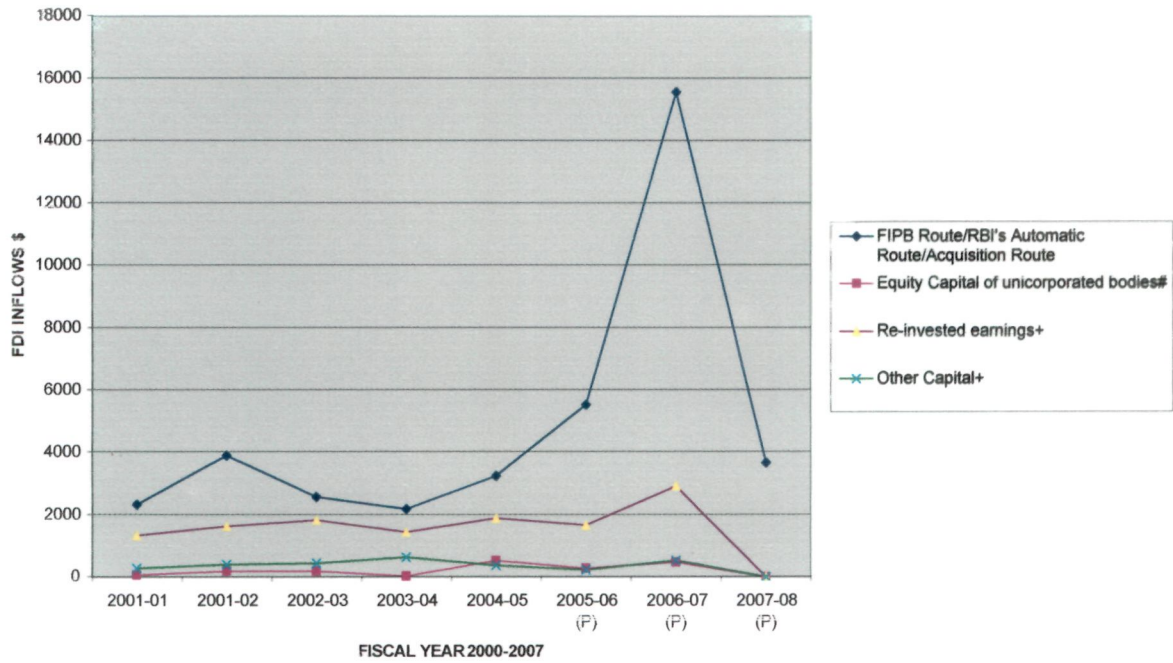


Fig 3.2

FDI INFLOWS AS PER INTERNATIONAL PRACTICES

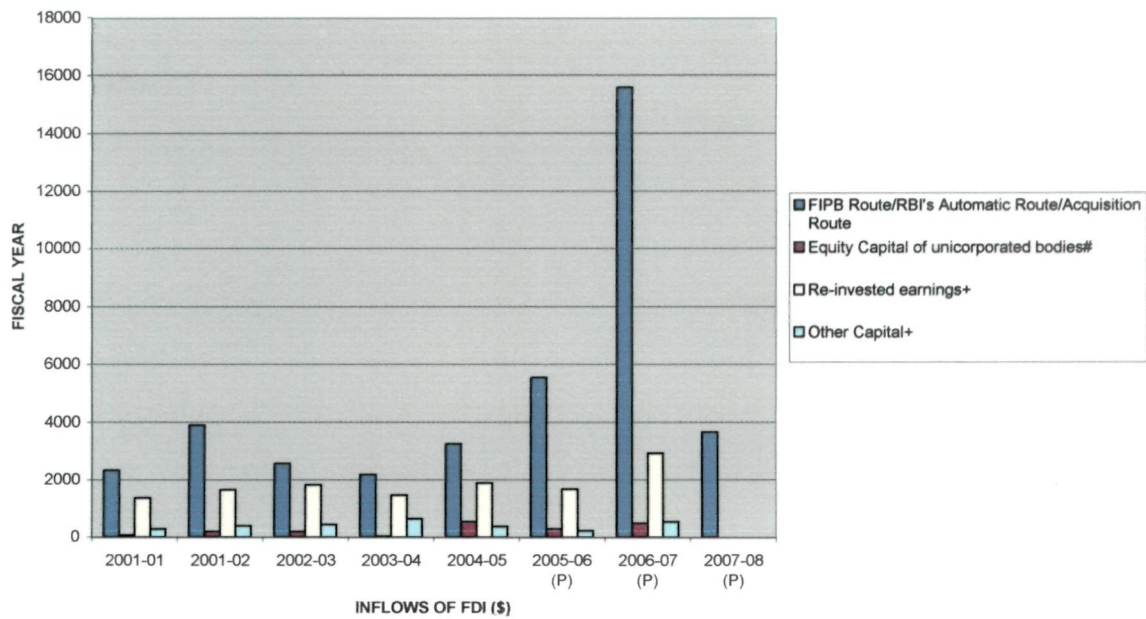


Fig 3.3

III) TRENDS OF FDI SINCE 1991

Being a developing country and owing to low GDP per capita, illiteracy and poor infrastructures has failed to attract FDI before 1991. But after the 1991 reform backed by some good policy implementation and reforms India is well known all around the world for its services and software activities on international platform. Now India is in the transition stage and the Government aims to attract more foreign investments by setting up special economic zones, technology & science parks and free trade and warehousing zones. With the removal of restrictions and the new policy regime on foreign investments there was a sudden spurt in foreign net inflows, approvals of foreign technical collaborations and increase in number of foreign technology approvals.

After 1991 FDI grew by 23% annually and further this increased to 44 per cent annual growth during 1991 to 2001.¹⁰⁰ In 2004, FDI inflows officially amounted to \$ 5.3 billion and US \$ 15.7 billion during the year 2006-07.¹⁰¹ They mainly came from the United States and Mauritius and concerned industrial sectors.

Here an attempt has been made to analyse the Trends of FDI inflows since 1991-2007 through a brief summary & the analysis of following variables:

A) Trend by Sources/ Country-wise

b) Trends by Region

¹⁰⁰ World Development Indicators, CD-ROM 2002; World Bank Little Data Book, 2001 & www.worldbank.org

¹⁰¹ World Investment Report (WIR 2005); A Better Investment Climate for Everyone. And RBI 2007 (Reserve Bank Of India)

- c) Trends by Types of FDI
- d) Trends by Sectors / Industry wise
- e) Trends by FDI inflows Category wise

During the financial year 2006-07, the FDI equity inflows have been US \$ 15.7 billion as compared to US \$ 5.5 billion received during 2005-06. It was the first time that FDI equity inflows into India have crossed the US \$ 10 billion mark and registering a growth of 185% as compared to the previous year. If reinvested earnings and other capital inflows are also included, the total inflows in 2006-07 add up to US\$ 19.5 billion compared to US\$ 7.7 billion during the same period last year showing a growth of 153%. During the first quarter of the Financial Year 2007-08, the FDI inflows have been US\$ 4.9 billion as against US\$ 1.7 billion received during the corresponding quarter of 2006-07, registering a growth of more than 185%. The first six months of the current calendar year (January-June 2007) has witnessed FDI inflows of US\$ 11.4 billion as against US\$ 3.6 billion received during the same period in 2006. This indicates a growth of 218%.¹⁰²

According to Management Consulting Firm AT Kearney's 2006 Global Retail Development Index (GDI) India is the most attractive destinations in International retail expansion.¹⁰³

¹⁰² According to a Press Release of Dept of Commerce- Govt. of India Ministry of Commerce & Industry Date : 17 Aug 2007 Location : New Delhi.

¹⁰³ Global Retail Development Index (GDI) by AT Kearney's 2006, Chicago; www.atkearney.com.

The 10 sectors attracting highest FDI into India are: electrical equipments (including computer software & electronics); services sector (financial & non-financial); telecommunications (radio paging, cellular mobile, basic telephone services); transportation industry; fuels (power plus oil refinery); chemicals (other than fertilisers); construction activities; drugs & pharmaceuticals; food processing industries and cement and gypsum products. The 10 top investing countries are: Mauritius, USA, UK, Netherlands, Japan, Germany, Singapore, France, South Korea and Switzerland.

Officially, at the end of 2006, India's stocks of FDI inflow amounted to \$ 50 68 mn, that is only 1.6% of investment received by developing countries (see table 4). The stocks represented 5.9% of GDP in 2006, a small ratio compared with developing countries average (26.4%). We however notice that Indian stocks were 23 times greater in 2004 and 30 times greater in 2006 than in 1990.

FDI in world Stock

	1990	2000	2004	2006
World	1 779 1	5 810 1	8 895 0	11 998 8
Developing	364 6	1 707 6	2 226 0	3 155 8
India	1 657	17 517	38 70	50 680

Source: WIR, 2007: Transnational Corporations, Extractive Industries & Development.

In 2006, India held the 12th slot as compared to 15th in 2004 in terms of inward FDI stock among developing economics (WIR, 2005 & 2007) (See Table-4) This radical shift in global FDI to India has taken place owing to

several Indian comparative advantages. A number of factors provide the needed fillip and impetus to the FDI inflow in the recent years.

SUMMARY OF FDI EQUITY INFLOWS:			
Compiled from the Fact Sheet of FDI from Statistical Department of India Updated May 2007			
A.	CUMULATIVE FDI EQUITY INFLOWS (equity capital components only)		
		Amount (RS) crore	Amount US \$ million
1	Cumulative amount of FDI inflows (from August 1991 to March 2007)	232041	54628
2	Amount of FDI inflows during 2007-2008 (from April to May 2007)	15180	3670
3	Cumulative amount of FDI inflows (updated upto May 2007)	247221	58298

Note: FDI inflows include amount received on account of advances pending for issue of shares for year 1999 to 2004

FDI EQUITY INFLOWS DURING FINANCIAL YEAR 2006-2007			
B.		Amount of FDI inflows 2006-2007	
	Financial Year 2006-07 (April-March)	(In Rs. Crore)	(In US \$ ml.)
1	April 2006	2972	661
2	May 2006	2443	538
3	June 2006	2405	523
4	July 2006	5235	1127
5	Aug 2006	2878	619
6	Sept 2006	4222	916
7	Oct 2006	7718	1698
8	Nov 2006	5157	1151
9	Dec 2006	9108	2040
10	Jan 2007	8515	1921
11	Feb 2007	3081	698*
12	March 2007	16896	3838*
	2006-2007 (upto March 2007)	70630	15730*
	2005-2006 (upto March 2006)	24613	5546
	%age growth over last year	(+) 187%	(+)184%

* Note: Figures are provisional, subject to reconciliation with RBI, Mumbai

FDI EQUITY INFLOWS DURING FINANCIAL YEAR 2006-2007			
C.		Amount of FDI inflows 2006-2007	
	Financial Year 2006-07 (April-March)	(In Rs. Crore)	(In US \$ ml.)
1	2006-2007 (Upto March 2007)	70630	15726*
2	2005-2006 (Upto March 2006)	24613	5546
	%age growth over last year	(+) 226%	(+) 232%

Note: Figures are provisional, subject to reconciliation with RBI, Mumbai

FDI EQUITY INFOWS DURING CALENDAR YEAR 2006			
E.		Amount of FDI inflows 2006-2007	
	Calendar Year 2007 (January-December)	(In Rs. Crore)	(In US \$ mn)
1	Year 2006 upto December 2006	50357	11122
2	Year 2005 upto December 2005	19299	4362
	%age growth over last year	(+) 161%	(+) 155%

The analysis of FDI inflows and outflows shows the FDI received by India's quite recent 42.4% since 2001, with a year on year increase of 26.5% in 2003. In 2006, FDI reached a record level of \$16 8 mn, and India held the 8th rank among developing countries to attract FDI (behind China, Hong Kong, Singapore, Turkey, Mexico, Brazil and S. Arabia). (See tabular chart 9). During the year 2007 there has been a spurt of FDI inflows to India and till May 2007 India has earned \$ 10,126 million (Rs. 43,672 crore) of equity inflows which is 232% more (or 226% in terms of Rs) from the previous year \$3048 million (Rs 13365 crore)

FDI Inflows (\$ Million)

	2000	2001	2002	2003	2004	2005	2006
World	1387 9	817 6	716 1	632 2	742 1	945 7	1305 8
Developing	252 4	219 7	219 7	166 3	233 2	314 3	379 0
India	2 3	3 4	5 6	4 3	5 7	6 7	16 8

* Annual Average

Source: WIR, 2007: Transnational Corporations, Extractive Industries & Development and other WIR's

India has been ranked as the most preferred destination in terms of financial attractiveness, business environment & availability of skilled labours.¹⁰⁴

UNCTAD has rated India as the 2nd most attractive investment destination among Transnational Corporations (TNC's).¹⁰⁵ India has experienced a commendable economic growth & FDI inflows after the 1991 reforms owing to some of its strategic policies and natural advantages.

A) TRENDS OF FDI BY SOURCES:

According to data relating to the period 1991-2007, Mauritius is the biggest source of "foreign" direct investment because of its low rates of taxation and an agreement with India on double tax avoidance regime. For these reasons, some multinationals set up companies in Mauritius before going to India. Investments from Mauritius in India are operated by Indian firms, either public or private.

¹⁰⁴ Global Services Location Index by AT Kearney's 2007; Chicago; www.atkearney.com.
¹⁰⁵ WIR 2005 UNCTAD Transnational Corporations and the Internationalization of R&D; United Nations New York and Geneva.

India has been attracting higher volume of FDI from US & Europe in comparison to Asia and US has been the largest investor accounting to about 1/3rd of the India's FDI approvals during the year 1991-95. But from that onwards Mauritius has remained the largest source of FDI it has registered 42.06% in 2007 so far. Far behind the USA (12.24% of FDI inflows received by India), United Kingdom (8.13%), Netherlands (5.64%), Japan (5.24%) are significant investors followed by Singapore (3.74%), Germany (3.67%), France (1.87%), South Korea and Switzerland (1.87%). The European Union's FDI in India is higher than that from the US. FDI from Netherlands, United Kingdom, Germany, and France, registered between 1991 and 2007 accounts for 20.89% of the total. In 2004-2007, Mauritius has still again been the main investor with 42.06% of total inward FDI, followed by United States then by UK, Netherlands, Japan, Singapore and Germany. *The United States is the first investor:* Most of FDI inflows come from a few countries. Between 1991 and 2005, investments of 10 countries accounted for 71 percent of FDI, main investor countries being the USA, the Netherlands, Japan, and the United Kingdom. (See table-10)

Table 7 - Top investing countries in India, according to FDI inflows 1991-2007 (\$ billion)

Ranks	Country)	2004-05 (April-March)	2005-06 (April-March)	2006-07 (April-March)	2007-08 (April-March)	Cumulative Inflows (Aug '91 to May '7)	%age with Total Inflows (in terms of rupees)
1	Mauritius	5141 (1219)	11441 (2570)	28759 (6363)	7946 (1934)	87108 (20080)	42.06
2	U.S.A	3055 (669)	2210 (502)	3861 (856)	823 (198)	25359 (6092)	12.24
3	U.K.	458 (101)	1164 (266)	8389 (1878)	169 (41)	16829 (3898)	8.13

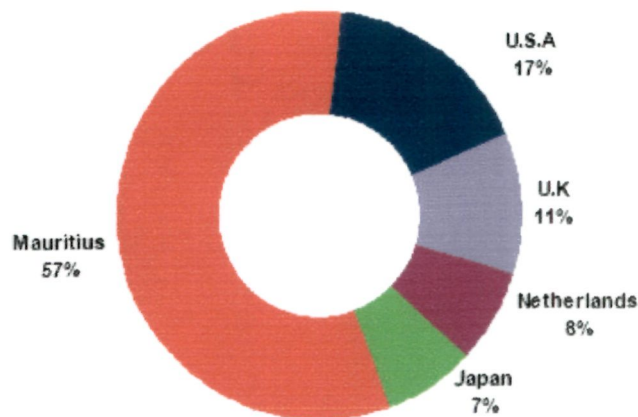
4	Netherland	1217 (267)	340 (76)	2905 (644)	278 (67)	11680(2704)	5.64
5	Japan	575 (126)	925 (208)	382 (85)	1543 (367)	10857 (2575)	5.24
6	Singapore	822 (184)	1218 (275)	2662 (578)	705 (172)	7754 (1800)	3.74
7	Germany	663 (145)	1345 (303)	540 (120)	549 (134)	7609 (1835)	3.67
8	France	537 (117)	82 (18)	528 (117)	76 (18)	3880 (914)	1.87
9	South Korea	157 (35)	269 (60)	321 (71)	40 (10)	3273 (832)	1.58
10	Switzerland	353 (77)	426 (96)	257 (56)	394 (95)	3273 (787)	1.58
Total FDI Inflows*		17138 (3754)	24613 (5546)	70630 (15726)	15180 (3670)	247221 (58298)	-

Note: (i) * Includes inflows under NRI schemes of RBI, stock swapped and advances pending for issue of shares

(ii) Cumulative country-wise FDI inflows (from Aug 1991 to May 2007) – Annex- 'A'

Source: RBI (Reserve Bank of India), Aug 1991 to May 2007

Country-Wise FDI Inflows in India (from August 1991 to May 2007)



Source: Reserve Bank of India 2007

Fig 3.4

In 2006-2007 we could see the wide increase in inflow from most of the countries is the changes in FDI policy during the year 2006-2007 vide Press note 4 February 2006. Some of the major initiatives taken are:

Change of route- Setting up of Greenfield airport projects, laying natural gas /LPG pipelines, cash and carry warehouse trading and export trading, brewing

of alcohol, manufacturing of industrial explosives, hazardous chemicals and market study and formulation and investment financing in the petroleum sector

Increase in equity caps: FDI caps have been increase to 100% and automatic route extended to coal & lignite mining, setting up infrastructure relating to marketing in petroleum and natural gas sector and exploration and mining of diamonds and precious stones.

FDI in new activities: FDI has been allowed upto 100% in power trading, processing and warehousing of coffee and rubber. FDI is also allowed now upto 51% for 'single brand' product retailing but after prior Government.

Removal of restrictive conditions: Mandatory divestment conditions for business and e-commerce has been removed.

B) Trends of FDI Sector-wise

India has a great number of experienced and competitive companies with capabilities in a large area of activities, from raw materials to the most cutting edges of services. But it has been observed manufacturing sector has attracted major portion of FDI and the inflows were heavily concentrated in manufacturing activities and services holding the second position. But now there has been increase in foreign investment in tertiary sector also which comprise mainly of service and services like financial and business services out of which electrical equipment (including computer software and electronics), services, telecommunications, and transportation were the biggest recipient of

FDI. Traditional sectors such as pharmaceuticals, telecommunications, auto components and other manufacturing activities have out-performed the Technology sector.

Since 1991 till current periods, FDI received by India was mainly concentrated to manufacturing e.g. electrical equipment (including computer software and electronics) which received 18.56% of FDI inflows, telecommunications (9.77%), transportation industry (7.79%), fuels (5.94%), and chemicals (4.62%). Services accounted for 18.56%. In recent years, some sectors such as electrical equipment, services, drugs and pharmaceuticals, cement and gypsum products, metallurgical industries have attracted more than the half of FDI. Due to potential enhancement especially In IT sector it is likely that FDI inflows in service sector will grow in coming period. This change has taken place due to business services (IT, software, financing, insurance, real estate, etc) in parallel with the “tradability revolution” in services in the world for call centers data entry and processing, electronic publishing, technical writing, telemarketing, internet, interpretation of medical scans, flight reservations, and so on. India is, by far, the country which attracted the greatest number of projects in IT and software. Because of potential enhancement especially in IT sector it is likely that FDI inflow in service sector will grow during coming years.

Manufacturing sector growth increased from 6% in 2002-03 and 7.4% in 2003-04 to 9% in 2005-06. Manufacturing sector growth rate had been higher than the overall industrial growth. The Department of Industrial Policy &

Promotion has launched a new scheme in the name of Industrial Infrastructure Up gradation Scheme (IIUS) during the Tenth Plan (2002-07). This Scheme aims at enhancing competitiveness of Indian industry through increased productivity, lower cost of production, improved product quality and increase in global market share. Special Economic Zones (SEZs) and emerging Special Investment Regions (SIRs) are to address the issues of scale of production, technology and infrastructure.

During the year 2006-2007 the major recipient of FDI were financial and business services with an inflow of around 4.5 billion and manufacturing was next at \$ 1.6 billion. But overall since 1991 to May 2007 manufacturing sector was the major recipient of FDI in India (See Table-11). India has moved up ten steps upward in world competitiveness ranking for the year 2006 - from 39 (in 2005) to 29 (in 2006) out of a sample of 61 countries - according to the Switzerland-based International Institute of Management Development (IMD).¹⁰⁶

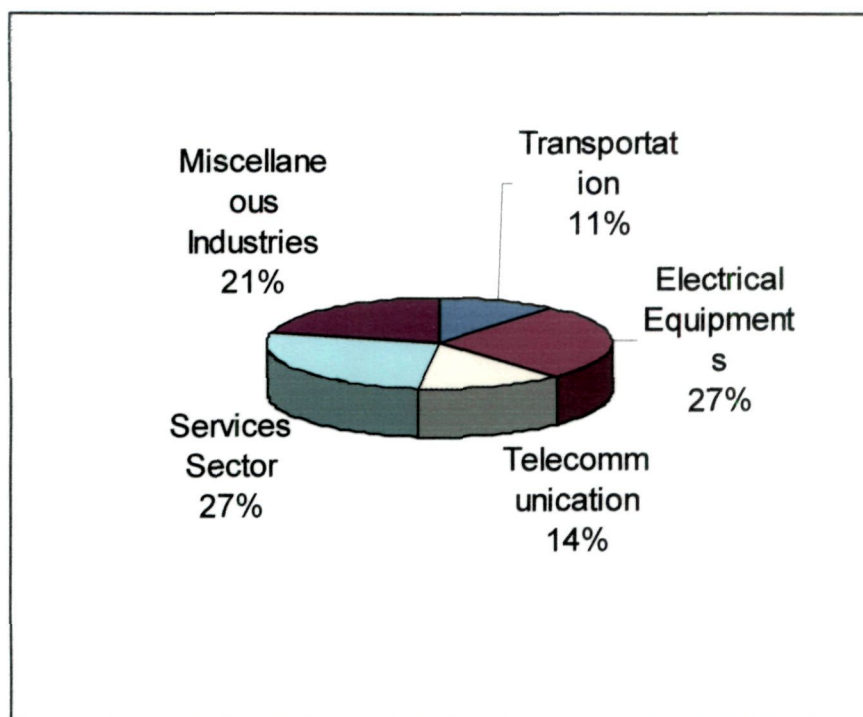
¹⁰⁶ Switzerland-based International Institute of Management Development (IMD).

Table 8 - Sectors attracting highest FDI Equity inflows (1991-2007) (\$ billion)

<i>Ranks</i>	<i>Sectors</i>	<i>2004-05 (April-March)</i>	<i>2005-06 (April-March)</i>	<i>2006-07 (April-March)</i>	<i>2007-08 (April-March)</i>	<i>Cumulative Inflows (Aug '91 to May '7)</i>	<i>%age with Total Inflows (in terms of rupees)</i>
1	Electrical Equipments (including computer software & electronics)	3281 (721)	6499 (1451)	12325 (2733)	2406 (573)	38440 (8800)	18.56
2	Service Sector (Financial & non- financial)	2106 (469)	2565 (581)	21434 (4749)	4195 (1011)	38434 (8851)	18.56
3	Telecommunications(radio paging, cellular mobile, basic telephone services)	588 (129)	3023 (680)	2354 (521)	3536 (867)	20227 (4759)	9.77
4	Transportation Industry	815 (179)	983 (222)	2112 (466)	717 (173)	16145 (3817)	7.79
5	Fuels (power +refinery)	759 (166)	416 (94)	1129 (250)	191 (45)	12296 (2877)	5.94
6	Chemicals (Other than fertilizers)	909 (198)	1979 (447)	930 (206)	61(15)	9571(2863)	4.62
7	Construction Activities * (including roads & highways)	696 (152)	667 (151)	4424 (985)	1892 (464)	11515 (2610)	3.33
8	Drugs & Pharmaceuticals	1343 (292)	760 (172)	970 (215)	30 (7)	5311 (1230)	2.56
9	Food Processing Industries	174 (38)	183 (42)	441 (98)	21 (5)	5165 (1282)	2.49
10	Cement & gypsum Products	1 (0)	1970 (452)	1098 (243)	22 (5)	4351 (995)	2.10
<i>Total FDI Inflows*</i>							

Source: Reserve Bank of India

Share of Major FDI Sectors (from August 1991 to May 2007)



Source: Reserve Bank of India 2007

Fig 3.5

Metallurgy, power and fuel sectors recorded the most growth with falls in transport, industrial machinery and food processing. The services sector (including telecommunications) increased its share during 1992-94 but this growth slackened off due to shortfall in demand.

C) TRENDS BY TYPES OF FDI

New equity capital inflows are usually in any two forms: M&A and Greenfield investment. India does not provide FDI statistics that break out M&A vs. Greenfield FDI. Most of the developing countries deploy Greenfield route to bring FDI as there are fewer existing companies available to acquire,

as compared with developed countries. India has emerged as one of the top player and favourite destination of FDI especially in Information Technology industry and was designated UNCTAD (United Nations Conference on Trade and Development) as the third most attractive research and development centre in the world by in its World Investment Report (WIR), 2005. There has lots of overseas investment from India e.g. India is the biggest foreign investor in the UK, outpacing even the US. From \$0.7 billion in 2000-01, the overseas investments increased to \$2.7 billion in 2005-06 and the estimated figure \$12 billion in 2006-07.

Since the year 2003 India has liberalised its policies of investment with an aim to get more and more advantages of FDI. According to UNCTAD's WIR 2006, developing and transition economies have emerged significant outward investors, as this has become an important tool for development of the domestic economy.

UNCTAD's WIR 2006 pointed out four factors that drive developing nations to go global.

- 1) It helps market penetration
- 2) Rising labour costs.
- 3) Competitive pressures in the domestic economy force MNCs to invest abroad.
- 4) Local policies of liberalisations stimulate outbound investments;

HOW MANY TYPE OF FDI: Direct investment undertaken by foreign firm in a host country can take the either forms like

- Greenfield Investments
- Merger & Acquisitions
- Joint Ventures
- Alliances
- Subcontracting licenses

But in case of India majority of inflows are in the form of Greenfield, Mergers & Acquisitions depending on whether the transaction involves mainly newly-created assets or just a transfer of existing assets from local companies. Greenfield involves new capital assets and effects growth via increased physical investment while Merger & Acquisition is just a transfer of existing one and is likely to effect growth via enhance productivity growth.

Mergers and Acquisition: In a merger or acquisition, one firm acquires an equity stake in an existing foreign firm and it occurs when a transfer of existing assets from local firms takes place

Greenfield investment: Greenfield FDI takes place as the establishment of a new overseas affiliate by a parent company. It is the principal mode of investing in developing countries and is the direct investment in new facilities or the expansion of existing facilities.

Mergers and Acquisitions: In recent years India is emerging a vibrant player in the world of mergers and acquisitions (M&A) and cross-border M&As have become a new mode of overseas market entry or growth strategy for Indian companies in many activities. While they benefit of an optimistic climate, some Indian firms go aggressively after M&As in industrial countries. The government encouraged outward FDI and overseas M&As and the growing trend in FDI inflows is also pushed by Greenfield investments. The amount of Greenfield FDI has risen by 82.8% in 2003 with 457 projects, and by 50% in 2004 with 685 projects (WIR, 2005). As for the M&As by foreign firms, they amounted to 949 million dollars in 2003 and to 1760 million dollars in 2004 and a spur could be seen in 2006 and 2007 4210 million dollars in 2006 to 6716 in 2006 (WIR, 2007) (See Table-12)

Recently Mr Lakshmi Mittal acquired Arcelor, and many in the information technology, pharmaceutical and banking sectors have made a host of other acquisitions. In many areas, *Indian companies have realised the benefits of expanding through investments abroad and benefit from the gains of spill over.*

Table 12 - Cross-border Mergers & Acquisitions in India, till 2006 (\$ million)

Year	2006	2005	2004	2003	2002	2001	2000	1999
Sales	6 716	4 210	1 760	949	1 698	1 037	1 219	1 044

Source: WIR 2004 and 2007

Table 13 - Cross-border Mergers & Acquisitions – Indian purchases (\$ million)

Year	2006	2005	2004	2003	2002	2001	2000	1999
------	------	------	------	------	------	------	------	------

Amounts of Purchases	4 740	2 649	863	1,362	270	2,195	910	126
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Source: WIR 2004, and 2007

By acquiring a partnership with a foreign firm abroad, Indian have reaped advantages and technology know-how and some have setup a subsidiary, with an attempt to grow and establishing one's brand in a new country. M&As promotes growth, obtaining additional products, more revenue, more labour force, more economies of scale thus an accelerated acquisition of production facilities and capabilities, and access to strategic assets (know-how, technology, market niches, international brand names, R&D). M&As provide ready to access to new markets and to new sales networks.

With other sectors making remarkably rapid growth the Indian IT and ITES companies already have a strong presence in foreign markets. The increasing engagement of the Indian companies in the world markets, and particularly in the US, is not only an indication of the maturity reached by Indian Industry but also the extent of their participation in the overall globalization process. Year 2007 can be called as the year of mergers and acquisitions for India there has been spurt of FDI inflows in Indian market making rapid economic growth, high liquidity levels and the continued reforms introduced by Indian government to attract foreign Investors. Indian corporations enjoying & making money in the growing economy have shown zeal and courage to excel are looking for more and more acquisitions.

ICICI bank's private research division has come out with a Global Investment Outlook report, which says the total equity deals struck by Indian companies have crossed 50 billion USD in 2007. In the same timeframe last year the equity deals stood at 13.5 billion USD due to strategic reforms and policies, incentives, tax and custom duties slashing so many Global Investors have turned to India instead of China. The report expects the second half of 2007 to be even better than first, which should bring total investment in India to more than 100 billion USD by year end, a five fold increase over last year. With the improve economic growth atmosphere lot of Indians are attracted to become entrepreneurs and investing in potentially viable & innovative projects. The investments are not just limited to technology firms but are spreading across large spectrum of sectors.

Mergers and Acquisition occurs when a transfer of existing assets from local firms takes place. The total M&A deals for the year during January-May 2007 have been 287 with a value of US\$ 47.37 billion. Of these, the total outbound cross border deals have been 102 with a value of US\$ 28.19 billion, representing 59.5 per cent of the total M&A activity in India. The total M&A deals for the period January-February 2007 have been 102 with a value of US\$ 36.8 billion. Of these, the total outbound cross border deals have been 40 with a value of US\$ 21 billion.

There were 111 M&A deals with a total value of about US\$ 6.12 billion in March and April 2007. Of these, the number of outbound cross border deals

was 32 with a value of US\$ 3.41 billion. There were 74 M&A deals with a total value of about US\$ 4.37 billion in May 2007. Of these, the number of outbound cross border deals was 30 with a value of US\$ 3.79 billion.

The sectors attracting investments by Corporate India include metals, pharmaceuticals, industrial goods, automotive components, beverages, cosmetics and energy in manufacturing; and mobile communications, software and financial services in services, with pharmaceuticals, IT and energy being the prominent ones among these.

Table 14 - Some of the biggest Acquisitions by Indian companies in 2004 and 2007

Acquirer	Target Company	Country targeted	Deal value (\$ ml)	Industry
Tata Steel	Corus Group plc	UK	12,000	Steel
Hindalco	Novelis	Canada	5,982	Steel
Mittal Steel	Arcelor	South Africa	26.9 billion euro 33,700	Steel
Videocon	Daewoo Electronics Corp.	Korea	729	Electronics
Dr. Reddy's Labs	Betapharm	Germany	597	Pharmaceutical
Suzlon Energy	Hansen Group	Belgium	565	Energy
HPCL	Kenya Petroleum Refinery Ltd.	Kenya	500	Oil and Gas
Ranbaxy Labs	Terapia SA	Romania	324	Pharmaceutical
Tata Steel	Natsteel	Singapore	293	Steel
Videocon	Thomson SA	France	290	Electronics
VSNL	Teleglobe	Canada	239	Telecom

Generally, the success or failure of M&A deals depends on the strategic integration & acquisition cost and on the way the integration is made.

However, most Indian purchasers are optimistic and in the process of acquisition there is a synergy between new local distribution networks abroad and low-cost manufacturing based in India. It is sometimes considered that it is easier to set up a Greenfield facility in the United States, while the M&A road is preferred in Europe (WIR, 2005).

If we calculate top 10 deals itself account for nearly US \$ 21,500 million. This is more than double the amount involved in US companies' acquisition of Indian counterparts. Graphical representation of Indian outbound deals since 2000.

Chart-3 shows the trend of known completed M&A deals and their value, between 2002 and 2006.¹⁰⁷ The bars on the figure indicate a sharp increase in the number of acquisitions completed in recent years. The data illustrate that overall deal value increased through 2005, and fell more sharply than the number of deals in 2006.⁹ The top 15 acquisitions by foreign firms in India during the same time period, by value, are presented in table 14 above. They are split almost evenly between services and manufacturing, with 8 service sector transactions, 6 manufacturing deals, and 1 utility acquisition. U.S. firms were the acquirers in 8 of the deals, with the remainder split among a number of countries.

¹⁰⁷ Global Investment Outlook report, ICICI Bank

Indian outbound deals, which were valued at US\$ 0.7 billion in 2000-01, increased to US\$ 4.3 billion in 2005, and further crossed US\$ 15 billion-mark in 2006. In fact, 2006 will be remembered in India's corporate achievement. This comprised 60 per cent of the total mergers and acquisitions (M&A) activity in India in 2006. And almost 99 per cent of acquisitions were made with cash payments.¹⁰⁸

Have a look at some of the highlights of Indian Mergers and Acquisitions scenario as it stands¹⁰⁹

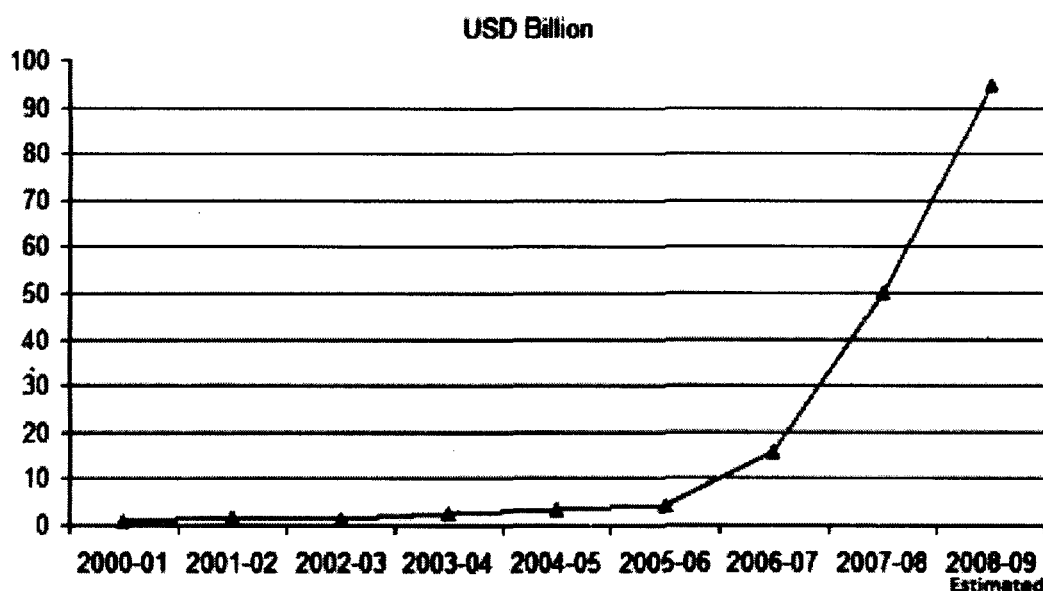


Fig 3.6

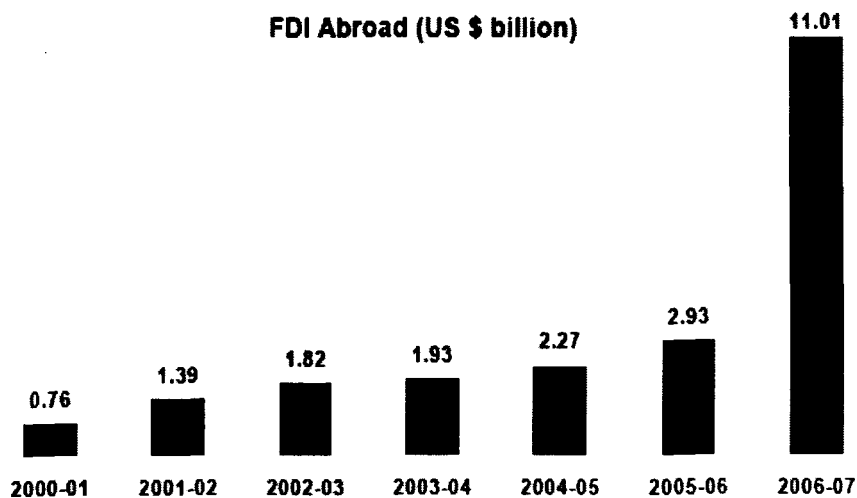
¹⁰⁸

Ibid

¹⁰⁹

<http://ibef.org>

Due to globalization and increasing competitiveness and efficiency of Indian industries local industrialist and investors are taking initiative of investing in foreign countries and setting up Indian multinationals with an aim to gain market share and reap economies of scale. It can be quite clearly seen from the below graph where overseas investment from India has increase by 13.5 times during the last 7-8 years. The 2006 -2007 can be called as year of corporate where they had large overseas acquisition deals by Indian firms. (See Chart-4)



Source: Reserve Bank of India 2007

Fig 3.6

Greenfield investment is the direct investment in new facilities or the expansion of existing facilities. Available data show that India has become a more attractive destination of Greenfield FDI in the recent year. The number of Greenfield FDI projects in India rose from 247 to 980 between 2002 and 2006, increasing at an average annual rate of 41 percent, reported Greenfield project

values increased from \$4.2 billion in 2002 to \$55.5 billion in 2006.¹¹⁰ The growing trend in FDI inflows is also pushed by Greenfield investments and India has also become a more attractive destination for Greenfield FDI in recent years. The amount of Greenfield FDI has risen by 82.8% in 2003 with 457 projects, and by 50% in 2004 with 685 projects (WIR, 2005). As for the M&As by foreign firms, they amounted to 949 million dollars in 2003 and to 1760 million dollars in 2004.

Between 2002 and 2006, 15 of the 300 projects that reported investment values were worth at least \$1 billion each (Table 2-2). These projects were concentrated in heavy industry¹¹¹ property, tourism, and leisure (Includes hotels, restaurants, and real estate) and electronics (Includes business machines and equipment, consumer electronics, electronic components, and Semiconductors). By business function, the projects are spread among manufacturing, construction, resource extraction, and R&D. The bulk of Greenfield FDI in India is destined for new facilities rather than expansions of existing ones. The share of expansion projects has been declining steadily over the period from 22 percent of reported projects in 2002 to 11 percent in 2006. Expansion projects accounted for 16 percent of total Greenfield FDI during the period, with almost one-half of projects in the information and communication technology (ICT) sector. The heavy industry and transport equipment sectors together attracted over \$30 billion in Greenfield FDI projects in 2006.

¹¹⁰ WIR, 2005*Annual average and WIR and 2004.

¹¹¹ Industry designations for greenfield FDI data are determined by OCO Consulting, (Loco monitor data by country do not match official Indian government statistics)

Largest 15 Greenfield FDI Projects in India during 2002-2006

Source country	Investing Company	Destination state	Capital (million dollars)	Technology/Product	Key business function
Canada	Royal Indian Rag International	Karnataka	9.000	Residential development	Construction
Luxembourg	Arcelor-Mittal	Bihar	8.940	Steel Products	Manufacturing
Netherlands	Isbat Industries	Maharashtra	4.456	Steel Cold Rolling/Forming	Manufacturing
Singapore	Flextronics	Andhra Pradesh	3.000	Wafers	Manufacturing
USA	Advanced Micro Devices (AMD)	Andhra Pradesh	3.000	Microprocessor	Manufacturing
South Korea	Pohang Iron & Steel (POSCO)	Orissa	3.000	Steel products	Manufacturing
Netherlands	European Aeronautic Defence and Space	Karnataka	2.600	Aircraft	R & D
UK	Vedanta Resources	Orissa	2.100	Aluminum Products	Manufacturing
Netherlands	Isbat Industries	Karnataka	2.000	Steel products	Manufacturing
Canada	Niko Resources	Andhra Pradesh	2.000	Natural gas exploration	Extraction
Venezuela	Petroleos de Venezuela	Rajasthan	2.000	Petroleum exploration	Extraction
Japan	Nissan	Orissa	1.500	Passenger Cars	Manufacturing
UAE	Eniaar Properties	Haryana	1.500	Property developer/management	Construction
USA	AES India	Chattisgarh	1.200	Electricity/gas utilities	Electricity
Germany	SAP	Haryana	1.000	Enterprise application software	R&D

Source: LocoMonitor FDI database; and The Financial Times, EADS to open Technology Centre in Bangalore

Table-15

Comparison between Greenfield and Mergers & Acquisitions (See Table-16)

It is very difficult to distinguish by mode of entry either Greenfield or Merger & Acquisition once the initial period has passed. Any direct investment undertaken by foreign firms can take either modes Greenfield or M&A. Greenfield involves mainly new capital assets and is likely to effect growth though increase of physical assets whereas M&A involves just a transfer of existing ones and hence effects growth through enhance productivity

Here are listed some of the difference between the impact on host-country of FDI:

COMPARISON BETWEEN GREENFIELD AND M&A			
S.NO	DESCRIPTION OF EFFECTS	GREENFIELD	MERGER & ACQUISITION
1	Effect on Host country	Immediate effect on capital formation and new avenues of employment	Short terms effect on capital formation and new avenues of employment
2	Effect on capital stock	It mainly include new projects where it adds directly to the stock of productive capital	Have no immediate or direct effect on stock
3	Effect on Employment	Have direct effect on employment	No direct effect on employment
4	Effect on Investment	It effects investment via increased physical investment	No direct effect on investment
5	Adverse effect	Hardly encourages any sort of monopolisation	It has bearing effects by monopolising production through acquisitions of firms

Table-16

Over longer term both are likely to provide similar investment inflows in similar situations. Moreover there are situations in which only can be used as an alternate

D) TRENDS BY REGION

Region-wise FDI Equity inflows— The country houses 29 states and 6 union territories. Each of the Indian state and union territory of India is blessed with several investment opportunities depending on their geographical location and availability of natural resources. These opportunities are further enhanced by the rapid technological advancements taking place in almost all states that enhance the ability to innovate and grow. There exists plethora of diversified investment opportunities across India and the respective state Governments are taking progressive steps such as development of powerful infrastructure and

formulating conducive and stable policies to harness the same. The state Governments have devised investor friendly policies in terms of incentives and concessions offered for several sectors such as biotechnology, infrastructure and information technology among others to promote FDI into their respective states. A healthy competition has emerged among states to attract investment in their states and this has proved to be beneficial for the potential investor. A small brief of the investment opportunities available in some of the Indian states is given here:

Table-17 Region-wise: Statement on RBI's Region-Wise (with State Covered) FDI Equity Inflows¹¹² (from January 2000 to May 2007)

Ranks	RBI's – Regional Office ¹¹³	State Covered	Amount of FDI Inflows		%age with Total Inflows (in terms of rupees)
			Rs (crore)	US \$ in million	
1	New Delhi	Delhi apart of UP & Haryana	39,661.01	8906.7	23.97
2	Mumbai	Maharashtra, Dadar & Nagar Haveli, Daman & Diu	38,886.55	8647.6	23.49
3	Chennai	Tamil Nadu, Pondicherry	12103.96	2696.4	7.32
4	Banglore	Karnataka	11429.75	2558.4	6.91
5	Hyderabad	Andhra Pradesh	6219.09	1382.6	3.76
6	Ahemdabad	Gujarat	4921.02	1086.1	2.97
7	Chandigarh	Chandigarh, Punjab, Haryana, Himachal Pradesh	1671.56	363.8	1.01
8	Kolkata	West Bengal, Sikkim, Andaman & Nikobar Islands	1587.32	350.0	0.96
9	Panaji	Goa	842.37	183.0	0.51
10	Koachi	Kerala, Lakshadweep	408.18	90.6	0.25
11	Bhubaneshwar	Orissa	366.83	81.6	0.22
12	Bhopal	Madhya Pradesh, Chattisgarh	300.55	66.5	0.18
13	Jaipur	Rajasthan	252.12	54.8	0.15
14	Kanpur	Uttar Pradesh, Uttranchal,	57.73	12.8	0.03
15	Guwahati	Assam, Arunachal Pradesh, Manipur, Meghalay, Mizoram, Nagaland,	41.74	9.0	0.03

¹¹² Includes equity capital Components only

¹¹³ Region-Wise FDI inflows are classified as per RBI's- Region-wise inflows, furnished by RBI, Mumbai

		Tripura			
16	Patna	Bihar, Jharkhand	3.34	0.8	0.01
17	Not indicated ¹¹⁴		46729.47	10395.0	28.24
Subtotal			165462.59	36885.7	100.0
18	Stock Swapped		14,525.44	3295.8	
19	Advance of FDI inflows (from 2000-2004)		8962.22	1962.8	
20	RBI's- NRI Scheme		589.15	134.4	
Grand Total (from January 2000 to May 2007)			189,539.40	42,278.7	

The distribution of FDI: From the above data it can be observed that apart from Delhi and 4 other states Maharashtra, Gujarat, Karnataka, Tamil Nadu have accounted nearly 1/5 of total FDI followed by Delhi 12%. It is more interesting to see that in the country of 32 states FDI inflows is confined to 10-12 states only and about 1/3rd of FDI is concentrated in 2 metros-Delhi & Bombay. States like Gujarat, Maharashtra Karnataka, & Tamil Nadu have been more reform oriented but Punjab, Haryana, Rajasthan, Uttar Pradesh, Madhya Pradesh, West Bengal, Bihar, Kerala & Orissa have lagged behind.

During the past two years this growth has again picked up. Since several key subjects (such as education, health, roads (except national highways), electricity, property rights etc.) lie within the jurisdiction of individual states. Since 1991-2007 there have been ups-down and variations in flow of FDI. Four states (Karnataka, Maharashtra, Tamil Nadu and Gujarat) accounted for over one-third of total FDI approvals. The shares of these individual states were, respectively, 7.6%, 13.7%, 6.7% and 5.3%. The shares of other major states

¹¹⁴ Represents inflows through acquisition of existing shares by transfer from residents. For this , Region-wise information is not provided by RBI

were considerably lower: West Bengal (3.7%), Andhra Pradesh (4.2%), Madhya Pradesh (4.5%) and Orissa (3.8 %). The shares of Kerala, Haryana, Punjab and Rajasthan were comparatively smaller whereas the flow of FDI into populous states such as Bihar and Uttar Pradesh has been virtually negligible. The quantum of investment approvals increased for all investing countries during 1991 to 2002 (See Table-17).

The USA is the largest investor in India with investment of over Rs. 570 billion (as of May 2002). Mauritius (largely because of its tax haven status is next) followed by U.K., Japan, South Korea, Germany, Netherlands, Australia, France and Malaysia (in that order). Amongst the countries that have increased their share in investment approvals are Mauritius and U.K. Approval shares of USA, Japan, Germany, Italy, and the Netherlands declined during 1991-2002.

India has lot to offer and immense potential in all its states here is a quick –view of potential of the states and their share of FDI inflows to India.

ANDAMAN AND NICOBAR	Tourism, I.T., Handicrafts, Fisheries, Hydro Carbon Energy, Shipping Sectors including Ports and Service Industry
ANDHRA PRADESH	Biotechnology, tourism, food and agro based industries, and information technology
ARUNACHAL PRADESH	Art and craft industries, tourism and educational services
ASSAM	IT Sector, Tourism, Agro- Horti & Food Processing Sector, Bamboo Industries and Bio Technology Sector
BIHAR	Agro-based industries, sericulture, chemical industry, tourism, biotechnology, pharmaceutical, etc.
CHHATTISGARH	Processing of medicinal, aromatic and dye plants, Automobile, auto components, spares and cycle industries,

	Manufacturing of plant, machinery & engineering spares, pharmaceuticals, etc.
DELHI	computer software, IT enabled services, electronics and high tech industries and small-scale industry.
GOA	Pharmaceuticals, Drugs and Biotech Industries, Food processing and Agro based Industries, IT and IT-enabled services, Eco tourism/Heritage tourism/Adventure tourism/Event tourism/Medical, Tourism and Entertainment Industry
GUJARAT	Agro Based and Food Processing Industry, Chemical and Allied Industry, Information Technology, Mineral Based and Allied Industries, Plastic and Allied Industries, Port Related activities and infrastructure and Textile Industry.
HARYANA	Agro based and Food Processing Industry., Electronics and Information & Communication Technology, Automobiles & Automotive Components., Handloom, Hosiery, Textile and Garments Manufacturing., Export- Oriented Units, Footwear, leather garments and accessories.
HIMACHAL PRADESH	units based directly on horticulture produce, mineral water bottling, automobile manufacturing units, cold storage units, electronic units, floriculture, handicrafts, precision industries, etc.
JAMMU & KASHMIR	food processing, agro based industries, floriculture, information technology, sports goods industry, etc
JHARKHAND	mining and mineral based industry, agro based industries, sericulture, engineering, auto components, tourism, ceramics, sports goods, etc
KARNATAKA	informatics, computer software, IT enabled services, telecom, auto and auto components, food processing, floriculture, biotechnology, tourism, infrastructure projects, etc.
KERALA	Mineral and Clay based products, Agriculture and Horticulture Produce, Traditional Industries, Tourism, Auto

	Components, Marine Products and Agro Processing industries.
MADHYA PRADESH	AGRO- processing industries, cement, textiles and apparels, tourism, power, education, information technology, etc.
MAHARASHTRA	auto industry, biotechnology, floriculture, food processing, textiles and leather.
MANIPUR	agro based industries, handicraft industries, sericulture, tourism, telecommunications, petrochemicals and pharmaceuticals.
MEGHALAYA	Minerals based industries, Horticulture and agro based industry, Power Generation, Export Promotion Industrial Park (EPIP), Tourism, Biotechnology- based units, Electronics and information technology and Tissue culture and orchid units.
MIZORAM	bamboo and timber based industries, food processing, agro- horticulture sector, mines and minerals, handloom, handicrafts, tourism, etc.
NAGALAND	FOOD processing industry, agro based industry, tourism, mineral based industry, pharmaceuticals, etc.
ORISSA	mineral and mineral based industries, agro and food processing industries, Information technology, tourism, biotech, pharma, handicrafts, handlooms, chemicals and fertilizers, etc
PODICHERRY	Information technology and software development, electronics, agro processing, textiles, leather products, light engineering and tourism.
PUNJAB	agriculture, dairy and poultry products, meat processing, leather industry, sports goods, textiles, light engineering goods, etc.
RAJASTHAN	Rajasthan: IT and ITES, biotechnology, agro based industries, power sector, education, urban infrastructure, tourism, gems and Jewellery, etc.
SIKKIM	ECO-tourism, handicrafts and handlooms, floriculture,

.	biotechnology, etc.
TAMIL NADU	Tamil Nadu: engineering, automobiles and components, software and ITES, biotechnology, health care, pharma, tourism, textiles, etc.
TRIPUTRA	Tripura: natural gas, food processing, rubber, tea, handicraft, bamboo, handloom, tourism, information technology, etc
UTTAR PRADESH	Uttar Pradesh: power, food processing, agro based industries, animal husbandry, engineering, horticulture, etc
UTTRANCHAL	hydropower, floriculture, horticulture, agro based and food processing industries, information and communication technology, etc.
WEST BENGAL	Agro based, tourism, information technology, metals, petrochemicals, leather, food processing, etc.

Table-18

Major Highlights of the Fiscal Year 2007-08 (Upto May'07)

MAJOR SECTORS RECEIVING INFLOWS	Services,.
	Telecom,
	Electrical Equipments
	Real Estate
	Transportation
TOP INFLOWS	M/s. Vodafone (Mauritius) (US\$ 801 million) (telecom), M/s. Matsushita Electric Works, Japan, (US \$ 342 million) (electrical products), M/s. GA Global Investments Ltd., (US\$ 258 million) (National Stock Exchange), M/s. EMAAR Holdings, Mauritius (US\$ 204 million) (Real estate construction), M/s. L B India Holdings Mauritius Ltd. (US\$ 118 million) (Real Estate) are the top foreign investments received during the current financial year 2006 & 2007.

TOP COUNTRIES INVESTING The total inflows received from the top 5 investing countries during the first two months of the financial year are US\$ 2.9 billion	<i>Mauritius</i>	<i>\$1.9 billion</i>
	Japan	
	Cyprus	
	USA,	
	Singapore	
TOP REGIONS The five regions mentioned above constitute two-thirds of the total inflows received	Delhi Regional Office of RBI	US\$ 1.3 billion amounting to around 36% of total inflows during the year.
	<i>Mumbai</i>	
	<i>Banglore</i>	
	<i>Chennai</i>	
	<i>Hyderabad</i>	

Table-19

iv) FDI inflows in India Vs some Asian Countries

Before 1991 reform FDI to India was very unsatisfactory but after the 1991 reform and particular during the past few years there has an accelerated economic growth in India. Some of the leading Southeast Asian economies (for example, Malaysia, Indonesia, Thailand and Philippines) no longer attract as much FDI as in the past. This is in sharp contrast to some East and Southeast Asian economies that continue to draw large FDI (for example, China, Hong Kong and Singapore).

During 2006-07, FDI inflows into India were more than double than those in 2005-06. Indeed, during April-January 2006-07, inward FDI into India

at US\$16.4 billion, was far higher than the annual average inflow of US\$2-3 billion during the late 1990s. Despite of lot of reforms India has lagged behind China and has failed to attract FDI as compared to other Asian countries owing to so many culminated factors:

- a) High fiscal Deficit
- b) High Govt Expenditures
- c) Non-implementation of approved projects and that resulting in slow industrial growth rate in both domestic and export industries
- d) Poor infrastructure
- e) Corruption
- f) Political Instability
- g) Procedural delays
- h) Bureaucratic system

But still if we analyse the figures and facts from Table 20 below India has remained far behind from those targets achieved by other Asian Countries. From table 1 it very clear that China & Hon Kong topped the list of largest recipient of FDI in Asia and have snatched up almost $\frac{1}{2}$ of the total FDI inflow to Asia with the balance $\frac{1}{2}$ going to other South-Asia sub-region. South Asian countries in Asia have done quite well in the resent past especially India it has record it highest ever in the year 2006 \$9.5 million with \$6.6 million in 2005. China recorded 70 million in 2006

**Table 20: Global FDI Inflows, by host region and major host economy
(2004-2006)**

Economy	2004	2005	2006*	Growth Rates
World	710.8	916.3	1230.4	34.3
Asia & Oceania	157.3	200	229.9	15.0
South, East & Southeast Asia	138.0	165.1	186.7	13.1
China	60.6	72.4	70.0	-3.3
Hong Kong, China	34.0	35.9	41.4	15.4
India	5.5	6.6	9.5	44.4
Indonesia	1.9	5.3	2.0	-62.9
Republic Of Korea	7.7	7.2	0.5	-92.6
Malaysia	4.6	4.0	3.9	-1.6
Singapore	14.8	20.1	31.9	58.8
Thailand	1.4	3.7	7.9	-114.7
* Preliminary estimates				

Source: UNCTAD Investment Brief 2007

In particular south, east and Southeast Asia have increasingly attracted manufacturing FDI and specific locations have evolved as countries move up the value chain. e.g. Thailand has been successful in attracting FDI in automotive, IT and food manufacturing, while the same is true for IT assembly in the Philippines, pharmaceutical and chemical manufacturing in Singapore and general manufacturing in China.

FDI inflows into India grew strongly to US\$17.5bn in 2006, two and half times the US\$6.7bn recorded in 2005 but despite continued strong growth in FDI inflows in 2005-06 to 2007, India has not been able attract that much what other Asian countries like China & Japan have achieved. With India's successful positioning as a business processing and IT outsourcing hub the services sector continues to be the main target for FDI in India.

By contrast, FDI in manufacturing actually declined in 2006 to US\$1.5bn, compared with US\$1.8bn in 2005, reflecting the fact that the environment for manufacturing FDI is not yet attractive enough due to inflexible labour laws and poor infrastructure. China attracts 80 per cent of the FDI inflows in Asia against India's 5.5 per cent.

India's share among developing countries in terms of attracting FDI is only 1.07 per cent compared to China's 17 per cent. Besides China, India attracts significantly lower FDI than many other South-East Asian countries, such as South Korea, Thailand and Malaysia. In 2000, China attracted FDI of over \$44 billion, Thailand over \$6 billion and South Korea around \$10.45 billion. The corresponding figure for India was only \$3.19 billion (*Global Development Finance: Country and Summary Data 2001*).

The average import weighted mean tariff for India is 28 per cent in 1999, compared to 18.5 per cent in 1998, 9.4 per cent in 1997, 5.5 per cent in 1996, 14.3 per cent for 1999 in China, Malaysia, Taiwan and Indonesia respectively (*World Development Indicators*).

According to the FDI Confidence Index, prepared by the International Monetary Fund, India's absolute attractiveness as an FDI destination had improved compared to the previous survey in June 1999. However, it still slipped to No. 11 from No 6 in the list of preferred destinations. The latest survey of executives of Global 1000 companies finds that few have India on their list of likely investment destinations over the next one-three years.

Chapter-4

*Trends in German FDI
flows to India since 1991*

TRENDS OF GERMAN FDI IN INDIA WITH SPECIAL REFERENCE TO IT SECTOR

Introduction :

Germany has been an important trade & development, investment & technology partner for India even before the economic reforms and liberalization of 1991. It was German company which built the 1st telegraph connect between Calcutta and London. India accounts for 0.5% of total German trade and ranks 7th among Asian exporters to Germany. Nearly 1600 Indo-German collaboration agreements and 600 Indo-German joint ventures are presently in operation. (source: Embassy India-Berlin : Bilateral Trade and investment) The largest co-operations are in the field of machinery and parts followed by heavy vehicles, chemicals, technical consultancy services, computer and electrical appliances etc.

From Indian perspective Germany has been an important source of FDI and enjoys position as one of the most prominent FDI investor in India. In 1990s German ranked 1st among European investors in India, and after 1991 liberalization and series of reforms German investment almost triples in the 1st few years after 1991 till 1997 but remained stagnant in the late 90s and started to decrease after the year 2000. German FDI investment shows a mixed trends and curve according to a Deutsch Bank report published late in 2006 suggested that the slow down in German FDI investment in India since year 2000 was that German investments was outpaced by UK and Dutch firms. The end-2007

figures are not satisfactory as Germany slipped to 7th position in terms of volume.

Objective

The objective of this present chapter is to give a fair account of the status of FDI in India during the recent period. In this chapter an attempt has been made to analyse the Trends of German FDI inflows since 1991-2007 through a brief summary of the following variables:

Trends of German FDI year-wise

Trends by Sector / Industry-Wise

Trends by Region or States

In the first section the emergence and the relationship of FDI with the important parameters of Indian economy has been analyzed through statistical modal known as Economic Model. In the subsequent section the Prospects, Trends and Issues of German FDI into India has been discussed in detail.

Emergence and the relationship of FDI with the important parameters of Indian economy:

The tremendous rise in FDI has produced three main schools of thoughts in this regard. First, the market imperfections hypothesis [Kindleberger (1969), Horaguchi and Toyne (1990)] which postulates that FDI is the Direct result of an imperfect Market of the world. Second, theorist says that the multinationals replace external markets with more efficient internal markets (Rugman 1985,1986). Third, the electric approach to international production, which says that the emergence of FDI is the outcome of changes in the pattern of

ownership internationalization of economies and corporations and locational advantages [Dunning (1985, 1986, 1988)].

Since above theories lack an empirical evidence for explaining the emergence and impact of FDI, a more scientific approach is used in this work to show the impact of FDI on the host economy.

Model Specification:

The model specification is compatible with the prevalent theories of international production where demand for inward FDI depends on variety of features of host country. This model discriminates three types of impacts on inward FDI: First Domestic market characteristic expressed by market size and the direction of trade flows. The market size (MRKTSZ) is measured by GDP of the host country and highlights the significance of large market for efficient utilization of resources and leverage of economies of scales. A direct relationship is expected between market size and FDI inflows.

The second parameter for study of FDI on the host economy comes from trade balance. The relationship between the direction of the host country trade balance (TRDBLN) and FDI inflow shows that trade surpluses indicate strong economy which encourages further inflow of FDI.

The third parameter is inflation rate which expresses the overall fiscal performance of the host country and the effectiveness of the services sector (IT enabled services here) high inflation indicates inability and failure of the RBI, the central bank, to conduct proper monetary policy. Thus it is expected that high inflation will discourage FDI inflows and moderately controlled inflation

will encourage inward FDI. The inflation rate (INFLT) is quantified by the host country GDP deflator whereas the effectiveness of services (SRVCS) is measured by the percentage of GDP generated in services. An effective service sector in terms of adequate infrastructure in the banking, finance, insurance, telecommunication and transportation and distribution is not only prerequisites for attracting FDI but definitely have a positive impact on the host country's ability to attract FDI.

The following economic model has been used in the present study for studying the impact of German FDI vis-à-vis its impact on the IT sector in particular and the Indian economy in general.

Conceptual Model:

German FDI = $X_0 + X_1 \text{ MRKS} + X_2 \text{ INFLT} + X_3 \text{ TRDBL} + X_4 \text{ SRVCS} + \text{Error}$

X_0 = Constant

X_1, X_2, X_3, X_4 = are the coefficient

E = Error term

Hypothesis Formulation:

The study proposes that there is a positive relationship between German FDI and above mentioned parameters of the host economy i.e., market size, trade balance, service sector (IT enabled services) Inflation rate. It also proposes that there is a dialectic and spiraling effect of FDI vis-à-vis fundamentals of an economy.

Estimation:

Maximum likelihood is applied for the calculation of H1. The data of German FDI routed through the IT sector in particular and overall economy in general and also data related to the different parameter of the host economy have been collected for a period of 6 to 7 years (from 2001-2002 to 2006-2007).

Financial year wise FDI inflows

FINANCIAL YEAR-WISE DIPP'S FDI EQUITY INFLOWS:

(Equity capital components only):

S. No.	Financial Year (April – March)	Amount of FDI Inflows (including advance)		Amount of FDI Inflows (excluding advance)		%age growth over previous year
		In rupees crores	In US\$ million	In rupees crores	In US\$ million	
(A)	1991-2000 (August 1991-March 2000)	60,605	16,698	59,698	16,484	-
1.	2000-2001	12,646	2,908	10,733	2,463	-
2.	2001-2002	19,361	4,222	18,654	4,065	(+) 65 %
3.	2002-2003	14,932	3,134	12,955	2,722	(-) 33 %
4.	2003-2004	12,117	2,634	10,237	2,225	(-) 18 %
5.	2004-2005	17,138	3,759	14,653	3,219	(+) 45 %
6.	2005-2006	24,613	5,546	24,613	5,546	(+) 72 %
7.	2006-2007 *	70,630	15,726	70,630	15,726	(+) 184 %
8.	2007-2008 (April – December 2007)	51,243	12,699	51,243	12,699	-
(B)	Sub. total (1 to 8 above) (from April 2000 – December 2007)	222,680	50,628	213,718	48,665	-
Cumulative Total *(A) + (B) (from August 1991 to December 2007)		283,284	67,326	273,416	65,149	-

Note: (i) FEDAI (Foreign Exchange Dealers Association of India) conversion rate from rupees to US dollar applied, on the basis of monthly average rate provided by RBI (DEAP), Mumbai.

(ii) * Includes Stock Swap of Shares US\$ 3.2 billion for the year 2006-2007.

Source: Fact Sheet on FDI , RBI 2007 (http://dipp.nic.in/fdi_statistics)

Chart-1

FDI DATA AS PER INTERNATIONAL PRACTICE

Amount in US \$ Million

FDI INFLOW RBI'S REVISED DATA:								
S.NO	Financial Year (April-March)		Equity					
		Year	FIPB Route/RBI's Automatic Route/Acquisi tion Route	Equity Capital of unicorporat ed bodies#	Re-invested earnings+	Other Capital+	Total FDI Inflo ws	%age growth over previou s year
A)	1991-2000 (August 1991- March 2000)	1991-2000	15,483	-	-	-	15,483	-
1	2000-01	2001-01	2339	61	1350	279	4029	(+) 52%
2	2001-02	2001-02	3904	191	1645	390	6130	(+) 52%
3	2002-03	2002-03	2574	190	1833	438	5035	(-) 18%
4	2003-04	2003-04	2197	32	1460	633	4322	(-) 14%
5	2004-05	2004-05	3250	528	1904	369	6051	(+) 40%
6	2005-06 (P)	2005-06 P)	5540	280	1676	226	7722	(+) 28%
7	2006-07 (P)	2006-07(P)	15585	480	2936	530	19531*	(+) 153%
8	2007-08 (P) (for May 2007)	2007-08 P)	3671	0	0	0	3671	-
B)	Sub Total (1 to 8 above) (April 2000-2007 MAY)		39060	1762	12804	2865	56491	-
Cumulative Total (A) + (B) (from August 1991 to May 2007)			54543	1762	12804	2865	71974	-

Source: RBI 2007

Chart-2

Year-Wise actual FDI inflows (in Rs. Billion)	
Financial year	Amount
Aug'91-March'2000	606.05
2000-2001	126.45
2001-2002	193.61
2002-2003	149.32
2003-2004	121.17
2004-2005	171.38
2005-2006	246.13
2006-2007	706.3
Total	2320.41

Source: RBI 2007

Chart-3

The Test Results:

The values of the correlation between German FDI and the parameters of the host economy.

r		correlation
FDI	GDP	+0.73
FDI	INFLT	+0.36
FDI	SVCS	+0.79
FDI	TRBL	+0.42

On the basis of the above finding this can be concluded that the first hypothesis is accepted

Justification:

Above table shows a positive correlation between FDI inflows and its subsequent impact on the market size of the host country, Direction of Trade balance and efficiency of service sector. The inflation rate however is not significant. The host country finds FDI Augmenting its overall national income, also as a factor which rectifies and normalizes its trade imbalances, smoothenes aberrations in its fiscal and monetary policies resulting into strengthening of its currency (upward shifts in its valuation) has also a positive multiplies effect on the manufacturing and trading sector resulting into strengthening of its service sector thereby experiencing a perceptible increase of service to GDP.

Another remarkable inference which can be drawn from above study is that a positive increase in fundamental of economy due to FDI inflow further

leads to subsequent FDI inflows to the same economy. There is a dialectic and spiraling effect of FDI vis-à-vis fundamentals of an economy.

Scope of German FDI in India IT sector

From the German investor's or any other country's investors point of view there is lots of scope for trade and FDI investment in the field of IT sector especially Software development and pharmaceuticals , health products etc. SAP AG the world largest business software company has announced its plan to invest EURO 0.76 billion in India over the next 5 years – Economic Times Dec 2006

Deutsche Bank has marked India as its No.1 destination for Software development IT and IT enabled services (source Global Strategy Report 2006, Deutsche Bank)

Germany's leading news magazine Der Spiegel has cited India as No. 1 destination for offshore development for German Software companies. Several global German corporations like Daimler Chrysler, Siemens, SAP, Deutsche bank, Lufthansa, GE/German office and IBM/German office have R&D /Call Centers in India. India with its excellent physical, civic and social infrastructure and a large pool of talented, educated, hardworking, English speaking workforce is well positioned to capture a substantial share of the ITES market thereby generating massive employment opportunities in ITES sector . An Indian market has lots to offer and attract FDI investors:

- a) Availability of Skilled Talent
- b) Large pool of English speaking professionals

- c) Good quality talent
- d) Industry academia interface
- e) High computer literacy
- f) Core Competence in Financial, Health Services.

Brief on Indian IT Sector

The Indian Software industry has brought about a tremendous success for the emerging economy and has grown from a mere US \$150 million in 1991-92 to a staggering US \$5.7 billion in 1999-2000. It is expected that the Indian Software industry will generate to total employment of around 4 million people, which accounts for 7% of India's total GDP, in the year 2008. The Indian information technology industry passed \$ 50 billion mark in 2006-07. Dataquest's annual DQ top survey of the Indian IT industry revealed that it recorded a growth of 32% in rupee terms and was little shy of 30% growth in dollar terms during the year. With a growth of 35% IT exports continued to hold majority of the revenue share catalysed by the emerging domestic business process outsourcing market, IT-enables services reported a growth of 48%. Domestic IT services reported a growth of 30% growth. The packaged SW industry witnessed a 19% rise. The top 20 IT players recorded the highest growth rate in the millennium by recording a 44.3% growth rate. With the top 3 players, Tata consultancy services, Infosys and Wipro, bagging several large deals and expanding their consultancy business the top 20 companies accounted for almost 77% of the total SW services exports. Turnover of the top 3 companies namely TCS, Infosys and WIPRO are over one billion dollars

each. India has emerged as a global player in IT with SW exports of 9.8 billion USD in 2002-03 and \$12 billion in 2003-04. The revenue from exports of IT and IT-enables services is expected to reach USD 57 billion in 2008, according to a McKinsey report. Of the Fortune 500 companies 220 outsource their software from India. 80 out of world's 117 SEI CMM level-5 companies are from India. Infosys has a turnover of USD one billion with market cap of \$12 billion. WIPRO has sales of USD 900 million with market caps of USD 11 billion. India IT and IT-enables services exports for 133 countries. India IT companies train people in 55 countries. NIIT and APTECH have 200 training centres in China. India's IT workforce is 650000. This is projected to reach 22 million in the next 10 years.

Today, the software industry in India exports software services to nearly 95 countries around the world. In 1986 the Indian government announced a new software policy which was designed to serve as a catalyst for the software industry. This was followed in 1998 with the World Market Policy and the establishment of the Software Technology Parks for India (STP) scheme. In addition to attract foreign direct investment, the Indian Government permitted foreign equity of upto 100% and duty free import on all inputs and products.

According to a NASSCOM-McKinsey report annual revenue projections for India's IT industry in 2008 are US \$ 87 billion and market openings are emerging across four broad sectors IT services, software products, IT enables services, and e-business thus creating a number of opportunities for Indian companies. In addition to the export market all of these segments have

domestic market components as well. The IT-enabled services industry in India began to evolve in the early 90's when companies such as American Express, British Airways, GE and Swissair set up their offshore operations in India. The different services lines of IT-enabled services includes customer care, finance, human resources, billing and payment services, administration and content development.

German FDI to India: Trends, Prospects & Issues

In this chapter an attempt has been made to give fair account of the status of FDI in India during the recent period. The analyses of the Trends of German FDI inflows since 1991-2007 through a brief summary of the following variables and data collected through various sources:

Trends of German FDI year-wise

Trends by Sector / Industry-Wise

Trends by Region or States

TRENDS OF GERMAN FDI SINCE 1991

1) Trends of German FDI year-wise

Before discussing the things at length let's have a look at the year-wise trends of FDI in India since 1991. India received the highest FDI equity inflow in the year 2006-07 which grew 187% over the previous year to touch Rs 70630 million in terms of Rupees. It is the highest FDI equity inflow into the country during any financial year in the post liberalization period. With almost 41% of Total Inflows Mauritius has been the top investor and has been the highest source of FDI inflows to India even before the economic reforms of

1991 and post liberalization periods to the year 2007. This is followed by USA, UK, Netherlands & Japan as the 2nd, 3rd, 4th & 5th largest investing countries respectively. These top five countries have accounted to 73% of the total investments made in India.

German FDI was constantly fluctuating between Rs 4 million to Rs. 7 million per year but owing to reforms of changes during recent years especially in the year 2006 and that also for the 1st time in the last 15 years German FDI catapulted to the highest ever of Rs 13.45 million in the year 2005-06. According to the latest figures from the Federal Statistical office in Wiesbaden, Germany Indo-German trade grew 15.7% during Jan to June 2007 during the period of year 2006. During the post liberalization period till now March 2007 India has received a maximum investment from Mauritius 41% approximately of the total inflows during the period. Germany is the 6th largest investor with a share of 3.68% of the total FDI inflows to India.

In terms of Cumulative figure of FDI inflows Germany is the 6th largest investor with a share of 3.6% of total investment made in India. Mauritius always had the advantage of the favourable bilateral double regime and low rate of taxation. As far as German investment is concerned the best year was 2005-06 (13.45 billion) and it was the 3rd largest investor but again in 2006-07 it slipped to the 6th slot. In 2006-07 infact it was outclassed and toppled by U.K., U.S.A., Netherland's aggressive and strategic series of investment in the manufacturing sector.

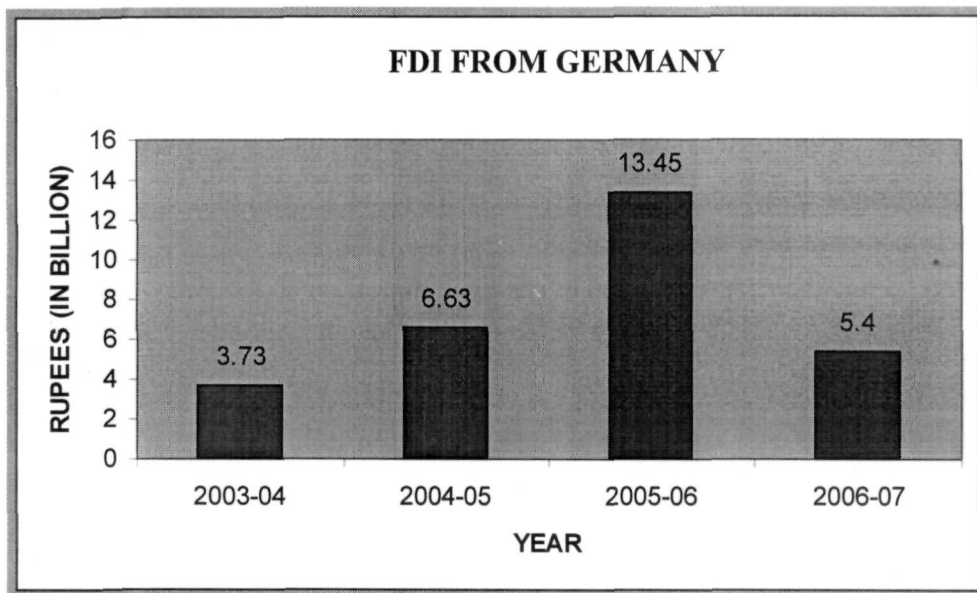


Chart-4

According to a Kearney study India has become the second-most favoured destination for FDI after China. According to the latest figures from the Federal Statistical Office in Wiesbaden, Germany during the post liberalization period Indo-German trade picked up remarkably and gained tremendous momentum since 1991 achieving a trade volume of nearly 4 fold since 1991. The principal sources of FDI after 1991 reforms have been Mauritius, U.S, U.K. Netherlands, Japan, Germany and Singapore.

Table : TOP 10 INVESTING COUNTRIES (FDI INFLOWS)

SHARE OF TOP INVESTING COUNTRIES FDI EQUITY INFLOWS (Financial year-wise):

Ranks	Country	Amount Rupees in crore (US\$ in million)					%age with total Inflows (in terms of rupees)
		03-04 (April-March)	2004-05 (April-March)	2005-06 (April-March)	2006-07 (April-March)	Cumulative Inflows (from Aug. 1991 to March 2007)	
1.	Mauritius	2,609 (567)	5,141 (1,129)	11,441 (2,570)	28,759 (6,363)	79,162 (18,147)	41.24
2.	U.S.A.	1,658 (360)	3,055 (669)	2,210 (502)	3,661 (856)	24,536 (5,894)	12.78
3.	U.K.	769 (167)	459 (101)	1,164 (266)	6,399 (1,878)	16,660 (3,857)	8.68
4.	Netherlands	2,247 (489)	1,217 (267)	340 (76)	2,905 (644)	11,422 (2,638)	5.94
5.	Japan	360 (78)	575 (126)	925 (208)	380 (85)	9,313 (2,209)	4.85
6.	Germany	373 (81)	663 (145)	1,345 (303)	540 (120)	7,060 (1,702)	3.68
7.	Singapore	172 (37)	822 (184)	1,218 (275)	2,662 (578)	7,050 (1,628)	3.67
8.	France	176 (38)	537 (117)	80 (18)	509 (117)	3,603 (895)	1.98
9.	South Korea	110 (24)	157 (35)	269 (60)	321 (71)	3,224 (823)	1.68
10.	Switzerland	207 (45)	353 (77)	426 (96)	257 (56)	2,879 (692)	1.50
TOTAL FDI INFLOWS *		12,117 (2,634)	17,138 (3,754)	24,613 (4,549)	70,630 (15,726)	2,32,041 (54,628)	-

Note: (i) *Includes inflows under NRI Schemes of RBI, stock swapped and advances pending for issue of shares.
(ii) Cumulative country-wise FDI inflows (from August 1991 to March 2007) – Annex-A.

Chart-5

Year-Wise Actual FDI inflows (in Rs. Billion)

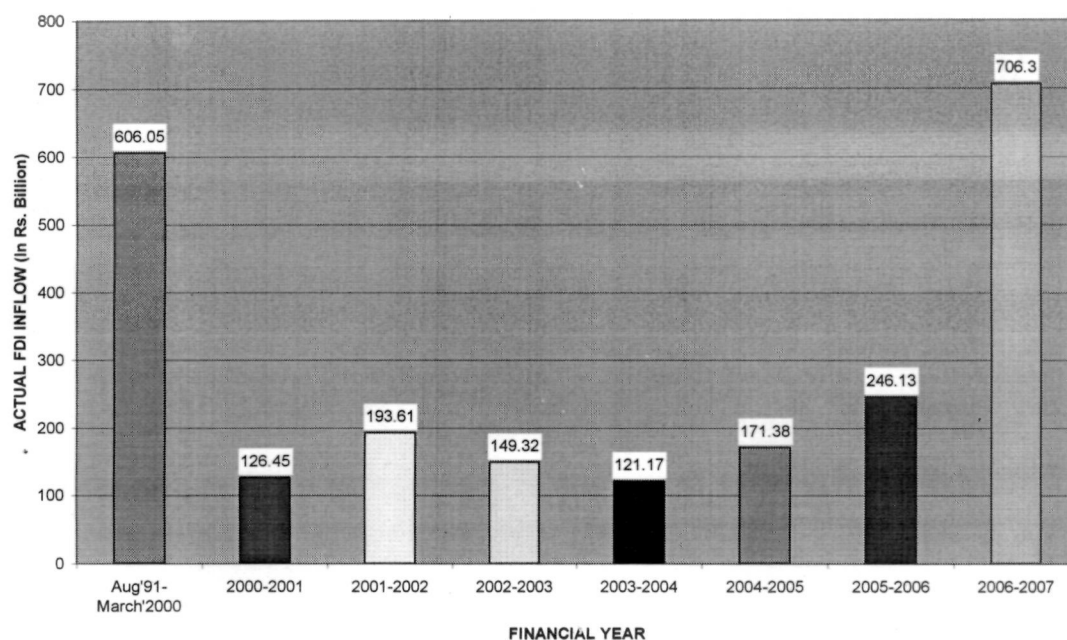


Chart-6

List of 10 companies in terms of inflows received by Indian companies are:

1	Micro Links Ltd	Chemical
2	Saint Gobain Glass India Ltd	Glass
3	Thyssenkrupp Electric Steel (I) Pvt Ltd	Special Alloys
4	Metro Cash & Carry India Pvt Ltd	Food Processing Industries
5	BHW Birla Home Finance Ltd	Financial & Non-Financial services
6	Mercedes Benz India Ltd	Automobile Industry
7	EBG India Pvt Ltd	Ferrous
8	Escorts Claas Ltd	Agricultural Machinery
9	John Deere India Pvt Ltd	Misc Mechanical & Engineering
10	SAP AG	IT & Software development

Chart 7

Bilateral trade relations has been growing and crossed the figure of EURO 10 billion in the year 2006 showing an increase of 39.18% exports from India were EURO 4.19 billion (+2.31) and imports were EURO 6.36 billion (+52.5%). Major items of exports to Germany are engineering goods, textiles and leather goods and major items of import are machinery and chemicals, pharmaceuticals. Here it is listed in Tables:

Investments / Technology Transfer

The top sectors attracting German investment into India are industrial machinery & electronic equipment. Germany is the 7th largest investor in India with cumulative FDI of EURO 1.27 billion (Aug 1991 to Dec'06) this is 5% of the total FDI inflow into India during this period. In 2005 it was 5th largest investor. In the 1st eleven months of the year 2006 Germany's approved investment increased substantially to EURO 296 million (compared to EURO 72 million in 2005) and EURO 160 million in 2004) Germany's approved investment in India had averaged EURO 200 million annually in the 90's. Nearly 1600 Indo-German collaboration agreements and 600 Indo-German joint ventures are presently in operation. The largest co-operations are in the field of machinery and parts followed by heavy vehicles, chemicals, technical consultancy services, computers, electrical appliances etc. Approximately 80% of the German companies in India are from the manufacturing sector mostly from the fields of electric and mechanical engineering.

Indo-German Collaborations:

There has been a constant flow of technology and investment from Germany through industrial collaboration. Since 1991 - the post liberalization era, the new spurt of German exports to India has led to an equally impressive boost in new investment and technical cooperation projects. Around 65 percent of German manufacturing companies already have a presence in India and another 30 percent are in the process of coming to the country.

The largest collaborations between India and Germany are in the field of machinery and parts followed by heavy vehicles, chemicals, technical consultancy services, computers, electrical appliances etc. The top sectors attracting German investment and technology transfer into India are electrical equipment, industrial machinery and metallurgical industry. Infrastructure development can be another area of cooperation between India and Germany.

2). STATE-WISE FLOW OF GERMAN FDI

India has 29 states and 6 union territories blessed with several investment opportunities depending on their geographical location and availability of natural resources. In the Indian economy states have been showing considerable interest in attracting foreign investments and a healthy competition has emerged among states to attract investment in their respective states enhanced by technological advancements. India's relation with Germany has been centuries old but interest and investment of Germany investors is still small and large cities and states has been the main destination of German FDI.

German investors have shown special interest in Technical collaborations which are usually available in big and metropolitan cities and moreover smaller states have more ground hassles and inflexible labour laws and relatively high taxes and poor infrastructure.

According to Deustche Bank Research = Jennifer Asuncion-Mund June 2006 most favoured states and locations that attracted major chunk German FDI investments in India are:

Main Destinations:	“Budding Locations”
Maharashtra	- Gujarat
Delhi	- Andhra Pradesh
Karnataka	- Tamil Nadu
West Bengal	

The Mumbai Regional Office of RBI registered maximum inflows of about 29% of the total inflows received during 2006-07. New Delhi, Chennai, Bangalore and Hyderabad are the other major RBI's Regions which have received FDI inflows during the same period.

With a total amount of Rs. 2078 mil., the largest volume of investments flowed into the country's capital, New Delhi in 2007. Karnataka and Maharashtra have played a key role and got their fair share of investments what they deserved with Karnataka getting a lead over Maharashtra with investments worth Rs.1403 mil. Maharashtra was third in the preference chart of German foreign investors with investment inflows of over Rs. 1186 mil. Following the

top three were Tamil Nadu (Rs.329 mil.), Andhra Pradesh (Rs.238 mil.) and Goa (Rs.13 mil.). Kerala and Chandigarh had the lowest German investments.

Region-Wise Profile & Break-up of German investment Inflows (in Rs. Mil)

STATE	INVESTMENT STRENGTHS	INVESTMENT WEAKNESS	PRIORITY AREAS	Inflows in 2006-07 (inRs. million)
Maharashtra	a) Well-Developed & fast improving physical and social infrastructure, b) Excellent Financial Infrastructure c) High Purchasing power d) Large market for goods & services	a) Power Defiant b) Deteriorating state government image due to weakness in state finances c) Poor irrigation in high variability in agricultural output	a) Software b) Electronics c) Textiles d) Auto-ancillaries e) Food-processing etc	1186.54
Delhi	a) Advanced physical infrastructure b) Hight rate of urbanization c) High purchasing power d) Highly developed service sector e) High purchasing	a) High Labour cost b) Distribution Losses c) Unfriendly local administration d) High Tariff	a) IT and IT enabled services b) Hotel and tourism c) Transportation d) Power	2078.11

	power			
Karnataka	a) Well-developed and adequately maintained telecom infrastructure b) Availability of high skilled workers c) Conservative fiscal policies of the state administration d) Relatively health state administration	a) Shortage of Power b) Poor irrigation in high variability in agricultural output c) High Tariffs d) Frequent rationing of freights & tariffs e) Slow rate of growth in road and railways networks	a) IT sector b) Auto components c) Leather goods d) Textiles e) Pharmaceuticals	1403.30
Gujarat	a) Business friendly state policies b) Responsive local administration c) Extensive network of railways, roads and ports d) Full telecom coverage e) Well-developed financial structure	a) High power tariffs b) High cost of labour c) Brain drain	a) IT and IT enabled services b) Electronics c) Gems & Jewellery d) Leather e) Garments f) Food processing	1.23
Andhra Pradesh	a) Improved governance and	a) State finances under	a) Electronics b) Power	237.80

	<p>administration</p> <p>b) Reform-oriented state</p> <p>c) 4th largest marked in the country</p> <p>d) Relatively high purchasing power</p>	<p>pressure</p> <p>b) Deficient Power Supply</p> <p>c) High power tariffs</p> <p>d) Low literacy</p> <p>e) Poor health coverage</p>	<p>c) Food processing</p> <p>d) Software</p> <p>e) Financial Services</p>	
Tamil Nadu	<p>a) Business savvy state government</p> <p>b) Responsive local administration</p> <p>c) Good railways & roads network</p> <p>d) Descent telecom network</p> <p>e) Availability of low cost labour</p>	<p>a) Power deficit</p> <p>b) High power tariffs for industries</p> <p>c) Low purchasing power</p> <p>d) Poor public healthcare</p>	<p>a) Electronics</p> <p>b) Software</p> <p>c) Auto-ancillaries</p> <p>d) Pharmaceutical</p> <p>e) Leather</p>	329.29
West Bengal	<p>a) Large market for goods and services</p> <p>b) Large rural area</p> <p>c) Highly educated population</p> <p>d) Large pool of skilled manpower</p> <p>e) National and international connectivity</p> <p>f) Power availability with low tariffs</p>	<p>a) Active trade unions</p> <p>b) Inadequate infrastructure outside the metro area</p> <p>c) Slow but responsive state government policies towards industry</p>	<p>a) IT and IT enables services</p> <p>b) Petro-chemicals</p> <p>c) Food processing</p> <p>d) Leather</p>	

GOA			a) IT & IT enabled services b) Pharmaceuticals c) Drugs and biotech industries d) Tourism & entertainment industry	12.92
Kerala				2.63
Chandigarh				1.20
States not indicated				145.11
GRAND TOTAL				5398.23

Chart-8

STATEMENT ON RBI'S REGION-WISE (WITH STATE COVERED) FDI EQUITY INFLOWS¹ (from January 2000 to March 2007)

Ranks	RBI's - Regional Office ²	State covered	Amount of FDI Inflows		%age with FDI inflows (in rupee terms)
			Rupees in crore	US\$ in million	
1.	MUMBAI	MAHARASHTRA, DADRA & NAGAR HAVELI, DAMAN & DIU	36,730.30	8,131.0	24.44
2.	NEW DELHI	DELHI, PART OF UP AND HARYANA	34,153.40	7,562.8	22.73
3.	CHENNAI	TAMIL NADU, PONDICHERRY	11,324.44	2,505.2	7.54
4.	BANGALORE	KARNATAKA	10,193.99	2,260.5	6.78
5.	HYDERABAD	ANDHRA PRADESH	5,779.05	1,276.0	3.85
6.	AHMEDABAD	GUJARAT	4,566.71	1,000.8	3.04
7.	CHANDIGARH ³	CHANDIGARH, PUNJAB, HARYANA, HIMACHAL PRADESH	1,580.03	342.1	1.05
8.	KOLKATA	WEST BENGAL, SIKKIM, ANDAMAN & NICOBAR ISLANDS	1,540.50	338.7	1.03
9.	PANAJI	GOA	839.89	182.4	0.56
10.	KOCHI	KERALA, LAKSHADWEEP	394.17	87.2	0.26
11.	BHUBANESHWAR	ORISSA	365.26	81.2	0.24
12.	BHOPAL	MADHYA PRADESH, CHATTISGARH	300.40	66.4	0.20
13.	JAIPUR	RAJASTHAN	250.19	54.4	0.17
14.	KANPUR	UTTAR PRADESH, UTTARANCHAL	57.73	12.8	0.04
15.	GUWAHATI	ASSAM, ARUNACHAL PRADESH, MANIPUR, MEGHALAYA, MIZORAM, NAGALAND, TRIPURA	41.74	9.0	0.03
16.	PATNA	BIHAR, JHARKHAND	3.34	0.8	0.01
17.	NOT INDICATED ³		42,161.85	9,304.1	28.03
SUB TOTAL			150,282.99	33,215.4	100.00
18.	Stock Swapped		14,524.73	3,295.7	-
19.	Advance of FDI Inflows (from 2000 to 2004)		8,962.22	1,962.8	
20.	RBI's-NRI Schemes		589.15	134.4	-
GRAND TOTAL (From January 2000 to March 2007)			174,359.09	38,608.3	-

¹ Includes 'equity capital components' only.

² The Region-wise FDI inflows are classified as per RBI's - Region-wise inflows, furnished by RBI, Mumbai.

³ Represents inflows through acquisition of existing shares by transfer from residents. For this, Regional- wise information is not provided by Reserve Bank of India.

3

Chart-9

RANKING FICCI FDI SURVEY 2006	STATE	RANKING FICCI FDI SURVEY 2005	STATE	RANKING FICCI FDI SURVEY 2004	STATE
1	MAHARASHTRA	1	MAHARASHTRA	1	MAHARASHTRA
2	TAMIL NADU	2	GUJARAT	2	KARNATAKA
3	KARNATAKA	3	KARNATAKA	3	ANDHRA PRADESH
4	GUJARAT	4	TAMIL NADU	4	TAMIL NADU
5	ANDHRA PRADESH	5	ANDHRA PRADESH	5	GUJARAT

Chart-10

Source: FICCI Survey 2004, 2005 & 2006

It is interesting to collate the chart 8 with chart 9 and 10. In the later indicate Global FDI flow to preferred geographical destination within India

There is a striking resemblance between the two charts indicating similar states drawing a greater chunk of FDI both from Germany in particular and from other countries in general. A significant trend noticed as well is. "It is largely the large-cap German companies which are dominating at present but SMES would increase their presence in future."

About 80% of all German investors present in India are huge manufacturing giants, mostly from the fields of electrical and electronic engineering, mechanical and chemical engineering including auto components. Some of these giants, include Daimler-Chrysler, Siemens, Bayer, BASF, Robert Bosch, Allianz, Thyssen Krupp, Corsteiss and SAP. They are among the top equity investors in the country. Small and medium sized enterprise (SME's) are also likely to follow the suit though it may take some while as they are at present inclined more towards CEE- 3 and other Eastern European countries.

Summary of FICCI Survey Rankings of States from 2004-2006

FICCI conducted the second annual study on FDI in India by gathering feedback from 385 foreign investors operating from India. The study covered a wide range of companies with turnovers from of Rs.10 crores to Rs. 850 crores.

FICCI studied the actual performance of various Indian States in terms of attracting FDI and also the investor perception about the states. To gauge investor perception, foreign investors were asked to rank the states in terms of having a positive investment climate. It found that the ranking according to investor perceptions is different from ranking in terms of FDI approved.

Ranking by Investors		Ranking according to FDI approvals	
Maharashtra	1	Maharashtra	1
Karnataka	2	Delhi	2
Andhra Pradesh	3	Tamil Nadu	3
Tamil Nadu	4	Karnataka	4
Gujarat	5	Gujarat	5
Haryana	6	Andhra Pradesh	6
Madhya Pradesh	7	Madhya Pradesh	7
West Bengal	8	West Bengal	8
Uttar Pradesh	9	Orissa	9
		Uttar Pradesh	10
		Haryana	11

Chart-12

3) Sector-wise FDI from Germany

According to Deutsche Bank Research approximately 80% of the German companies in India are from the manufacturing sector mostly from the fields of electric and mechanical engineering. The list includes prominent German companies like Daimler Chrsyker, Bayer, Siemens, BASF, Robert Bosch, SAP and Thyssen Krupp. The services sector has been lagging behind but it has been observed that quite few German investors are increasingly tapping India's knowledge based expertise especially seeing that enormous

opportunities exist in the Software product, IT services (Back-office processing, legal and medical transcription, content development

The five major sectors that have attracted highest German FDI into India during the year 2006-07 are services, electrical equipments (including computer software & electronics), telecommunication , construction and real estate activities. Electrical equipment sector (including computer software & electronics) has received 22% during the year 2006-07 as compared to 26.1% during the previous year 2005-06. The research also highlights the major sectors:

- a) Electronic and electrical equipments
- b) Auto components
- c) Pharmaceuticals
- d) IT and IT-enabled services

In this chapter we have discussed about the IT and IT-enables services and FDI inflows in this sector from Germany. The IT industry in India is growing at a rapid pace is the main attraction for German investors. It is dominated by IT enabled services that plays a major role in India's economic growth. As Germany is to automobile, China is to manufacturing India is to BPO (Business Process Outsourcing).

From the German investor's or any other country's investors point of view there is lots of scope for trade and FDI investment in the filed of IT sector especially Software development and pharmaceuticals , health products etc.

SAP AG the world largest business software company has announced it plan to invest EURO 0.76 billion in India over the next 5 years .¹¹⁵

Deutsche Bank has already marked India as its No.1 destination for Software development IT and IT enabled services.¹¹⁶ Germany's leading news magazine Der Spiegel has cited India as No. 1 destination for offshore development for German Software companies.¹¹⁷

FDI attracted by IT & IT Enabled services in India		
Year	Electrical equipments Including computer Software & electronics	Sectors telecommunication (radio paging, cellular mobile, basic telephonic service)
2003-2004	2449 (532)	532 (116)
2004-2005	3281 (721)	588 (129)
2005-2006	6499 (1451)	3032 (680)
2006-2007April	254 (56)	1344 (299)

Chart-13

Share of German FDI		
Year	Amount	
	(Rs cr)	(US \$ Million)
1991-march2003	4139	1052
2003-2004	373	81
2004-2005	663	145
2005-2006	1345	303
2006-2007 (April 2006)	14	3

Source: RBI 2006

Chart-14

¹¹⁵ Economic Times Dec 2006

¹¹⁶ Global Strategy Report 2006, Deutsche Bank

¹¹⁷ Annual Review 2007 of Indo-German Chamber of Commerce

German FDI in India into IT as % total FDI flows from Germany

Year	IT & IT enabled services
1991	20
1992	17.18
1993	13.97
2004	11.54
2005 **	15.12
2006 **	14.21
2007 **	15.23

** estimated

Source: RBI 2006, IGCC

Chart-15

The major sector that have attracted highest FDI into India during the year 2006-07 are services, electrical equipment (including computer software & electronics), telecommunications, construction & real-estate activities. As per the Annual Review 2007 of Indo-German of Chamber of Commerce the major sectors attracting FDI approvals from Germany since liberalization are electrical equipment (including computer software & electronics) - 16.07%, transportation industry – 12.87%, metallurgical industries – 12.36%, fuels (power & oil refinery)- 10.6% and services sector – 10.42% Top sectors attracting FDI inflows from January 2000 to March 2007 from Germany are chemicals (other than fertilizers) 24.24%, the services sector (financial and non-financial) – 10.83%, transportation industry – 7.44%, glass industry – 7.35% and metallurgical industries – 6.48%.

Out of the 7846 technical collaborations approved in all over the last sixteen years, approvals for Germany were totally 1103 (14.06%) of them since 1991. The highest technical collaborations have been in industrial machinery

(209), followed by electrical equipment, including computer software & electronic (167), chemicals, other than fertilizers (126), miscellaneous mechanical & engineering industry (102) and transportation industry (94).

Sector-Wise Break-Up of German FDI Inflows (Rs. In mil.)					
S.No	Sector	Total Inflows Received		Received by RBI (Automatic Route)	
		2005-06	2006-07	2005-06	2006-07
1	Metallurgical Industries	45.63	0.10	45.63	0.10
2	Fuels (Power & Oil Refinery)	14.75	236.45	14.75	236.45
3	Electrical Equip (Incl. Software + Electronics)	44.33	429.73	23.21	419.54
4	Telecommunications	0.10	1.23	0.10	1.23
5	Info& Broadcasting (Film + advertisement)	0.00	0.67	0.00	0.67
6	Land Transport Industry (auto ancillaries)	714.51	56.49	401.06	56.49
7	Air Transport (air freight)	0.00	525.56	0.00	525.56
8	Sea Transport (shipping)	0.00	117.00	0.00	117.00
9	Industrial machinery	114.92	120.74	110.44	90.74
10	Machine Tools	1.51	34.37	0.88	10.00
11	Earth-Moving Machinery	0.00	45.79	0.00	45.79
12	Misc. Mechanical +Engineering	940.35	1.27	142.22	1.27
13	Comm. office & household equip	39.12	91.16	0.00	0.00
14	Medical & Surgical Appliances	23.70	0.24	23.70	0.24

15	Chemicals (other than fertilizers)	10,314.38	181.25	3.56	2.49
16	Textiles (incl. Dyed. Printed)	0.05	12.00	0.05	12.00
17	Food Processing industries	5.43	1.00	5.43	1.00
18	Soaps, cosmetics & Toiletries	13.09	248.74	0.00	0.00
19	Leather, Leather Good, Pickers	0.00	101.91	0.00	0.00
20	Consultancy Services	76.03	19.53	0.65	19.53
21	Services Sector	109.13	2,248.22	0.95	928.72
22	Hospital & Diagnostic Centers	0.00	3.75	0.00	3.75
23	Hotel & Tourism	5.11	23.50	5.11	23.50
24	Trading (Wholesale cash + carry)	181.51	714.62	1.20	31.61
25	Retail Trading (Single Brand)	0.00	0.19	0.00	0.19
26	Construction Activities	0.00	0.85	0.00	0.85
27	Misc. Industries	553.17	181.91	170.97	47.79
	Grand Total	13,445.26	5,398.27	1158.98	2,412.56

Source : Ministry of Commerce, Government of India

Chart-16

Although Germany has been the largest investor from European Union but when it comes to IT sector German investors were shy and their conservative attitude towards outsourcing and quality driven market kept them away from investing in the Indian market. But now the whole picture has changed and Indian IT industry is posting growth rate of such as 32% in 2006-07 IT filed has become a large point of interest and it is a perfect time for German investors to try their proves in the Indian IT sector.

Still it is not too late for German investors there exist opportunities in the enterprise application integration and other tested fields of IT and IT-enables services where some of the world biggest players are operating successfully. Taking into consideration of the fact that India has a huge and fast growing domestic market continued reforms, economic policies, and institutional reforms a better environment can be created that would be conducive for private investment and economic growth and substantially large volumes of FDI will flow to India.

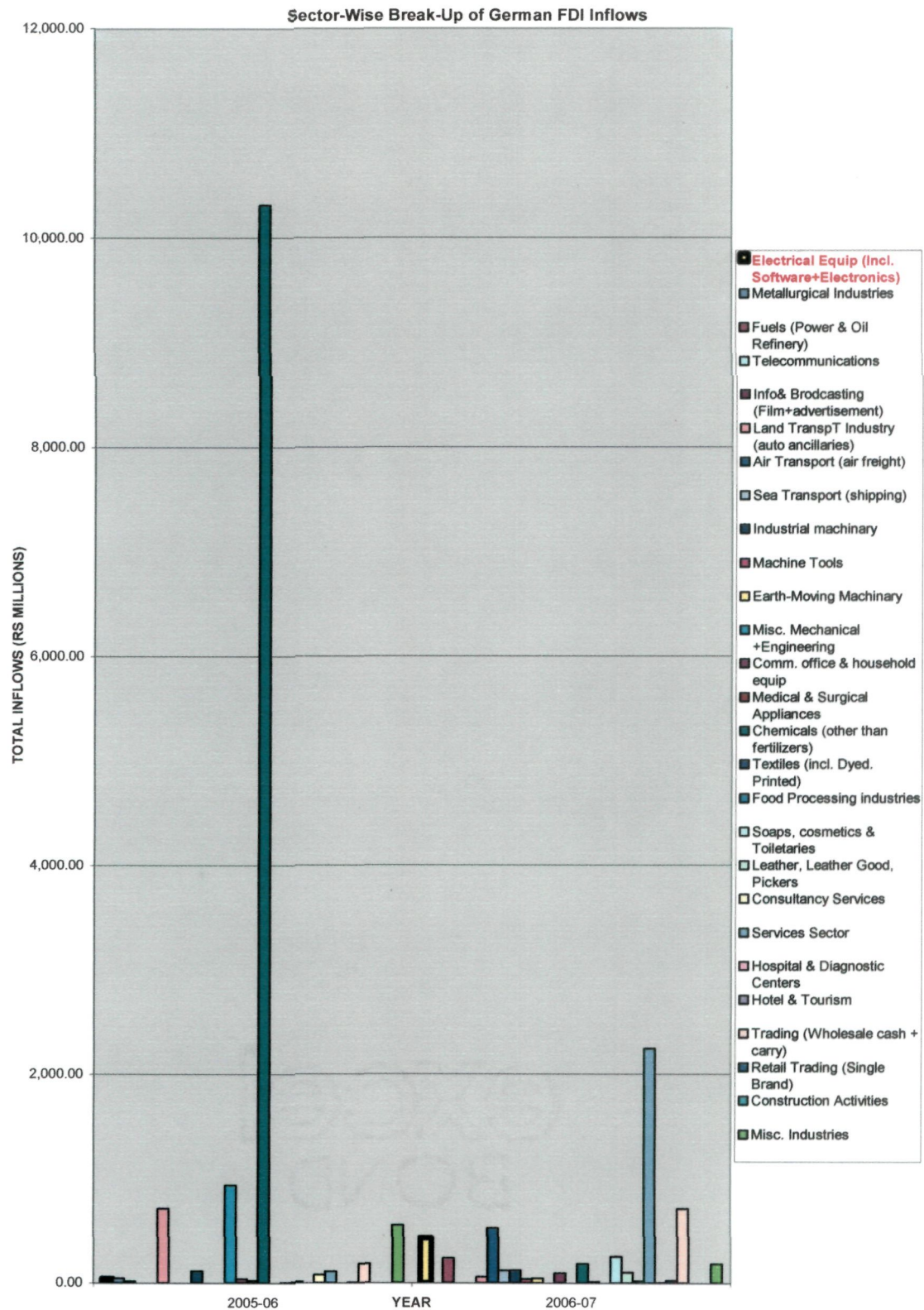
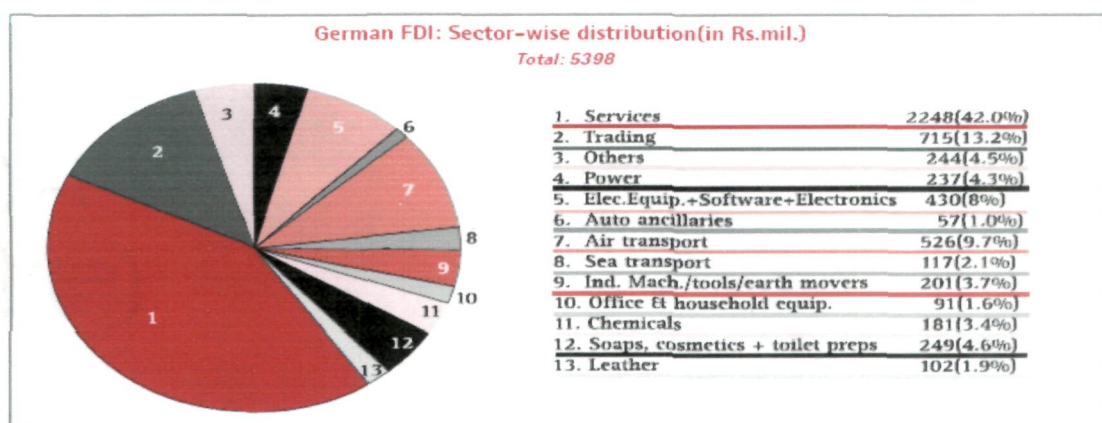


Chart-17

It is interesting to note that inflow from Germany in the IT sector was very low in the year 2005-06 but has shown considerable high performance in the year 2006-07. This speaks about the interest German investors are showing in the Indian IT sector.

Automatic Route:

As can be seen from the table above, more and more investments from Germany are coming in through the automatic route (the Reserve Bank of India, not requiring government approval). In the power and air transport sector all of the investments came in through the automatic route, while in other important sectors like services and trading, the major share of investments were made through the Foreign Investment Promotion Board i.e. with government approval. Most of the inflows in IT & IT enabled services /Electrical Equipment has come through automatic route accounting to 419.54 out the total of 429.73 million inflows in the sector.



Source: Annual Review 2007 Indo-German Chamber of Commerce

Chart-18

German FDI figures of the last financial year shows that nearly 42% and with that, the largest share of investments was taken up by the services sector, which include financial, non-financial, insurance, banking services. Apart from this, strong growths in investments were seen in the trading sector – wholesale cash and carry - (Rs. 715 mil.); Air transport, whereby all of it was air freight (Rs.526 mil.) and Electrical equipment, including software and electronics (Rs.430 mil.). Other categories which received substantial investments over last year were power (Rs. 237 mil.) and Soaps, cosmetics & toilet preparations (Rs. 249 mil.).

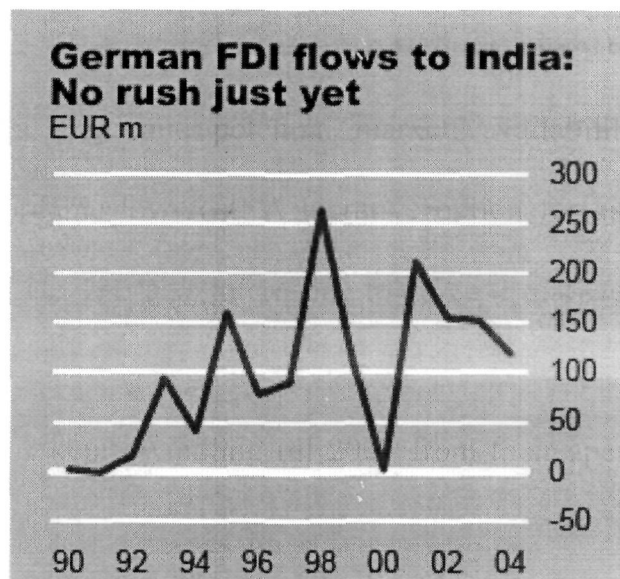
III. CURRENT STATUS AND FUTURE PROSPECTS OF GERMAN FDI TO INDIA

During the post-liberalization period since 1991 to 2007 the Indo-German Trade has increased nearly four fold in terms of rupees showing a tremendous momentum. The year 1991 was a significant year for Indo-German trade since it marked a first-ever export surplus (DM 376 million). From 1995 to 1997 imports from Germany overtook exports and the remarkable year was 1995 which showed an import growth of 37%. From 2003 onwards overall trade has been growing at the rate of over 20% per annum and again the year 2006 showed a phenomenal increase of 39%. The volume and trade doubled in last 3 years with imports going up by $2\frac{1}{2}$ times export going up $1\frac{1}{2}$ times.

Studies report-double-digit increase in sales and net income to German corporation in recent years (export 2004-2007) owing mainly to India's consistent pursuit of an open market policy. A hearty sign is that many Indian

operations of German concerns have outperformed their parent firm's performance.

German investors and institutions are appreciating Indian IT sector in terms of being a huge and potential market; availability of high-skilled workforce at affordable low-cost; A lucrative option for any forward linking investment enterprise. It is also interesting to observe that German FDI in India has been more chequered and subject to fast growth changes and unlike trade, investment streams kept dwindling till 2004 from their apex growth in 1999-2001. (Chart 3).



Source : Deutsche Bundes bank 2005

Chart-19

Relatively, the trend afterwards (see chart 16) has been quite upbeat. There are indications of increasing enthusiasm among German investors in 2005, since 75 old small and medium sized German organizations came to India to identify options for mutual trade relations. Many of whom are now

contemplating seriously to augment their operations in the country. All this implies that the prospect for ROI for German investors is relatively better at present. Despite certain bottlenecks in the procedures, policies and infrastructure which inhibited German investors from entering the country in a big ways, the trend now is gradually turning around into a favourable matrix for those who are willing to brave the apparent risks and constraints as they are deemed to be rewarded also with gainful returns.

In fact, according to IGCC report 2007 more than half of the total Indo – German collaboration in India are technical in nature. Refer to German FDI inflow in specific manufacturing sectors. It is high time for German investors to invest in the IT sector as market has matured enough to over-power the global market. Modern German companies' COs must think in terms of investing in India to earn stream of ROI or at least royalty pay off. Their only constraint in the process might be their low market capitalization and thin capital base. A still third significant trend and prospect that draws attention is that "It is the large cities in India which are the main destinations of German FDI" Of about 630 Indo-German joint Ventures currently operational in India, roughly one third of these are located in the state of Maharashtra followed by Delhi and Silicon Valley of Bangalore. Over the years, the three southern States of Karnataka, A.P. and T.N have seen increased commitments of trade inflows. West Bengal is another budding location, especially in the field of IT. In preferred investment locations of German companies are listed in (Tabular)

Chart 8

The present chapter underscores facts about German FDI flow in India in the perspective of the problems, constraints and prospective promises that it has to offer in future for German investors in the country. We find that the overall climate of investment and German FDI flow to India are quite positive. To arrive at the positive conclusion let's scrutinize the whole process in the wake of facts including the historical ones.

Historically trade links between German and India

Back to the early 16th century with ship building firms like Augsburg and Nuremberg developing trade relation with India. A lot of other German companies were founded with the purpose of trade between the 16th and 18 centuries, however more sustained trade venture from Germany activated from the 19th century. The first German trade setup was founded in Bombay and Calcutta in 1844 by the Free and Hanseatic City of Hamburg. In 1867, the telegraph line between Calcutta and London was laid by Siemens. Bayer initiated its local operations in 1896. Despite a long history there is still a lot of scope in Indo-German business relations for mutual trade improvements. Since the mid-1980s, German concerns have committed a cumulative EUR 1.5 bn only of FDI into India. The major chunk goes to either the EU or the US. The Central and Eastern Europe have become increasingly lucrative destinations as they are likely to join the en. India is clearly not as preferred destination of German FDI. India's share in German FDI in only beginning to pick up of late as indicated is the chart 20.

Germany's trade with the Asia-Pacific countries: Top Ten (in mil. Euro)						
Country	German imports (Jan.-Dec.)		% change	Country	German exports (Jan.-Dec.)	
	2006*	2005			2006*	2005
China	48 751	40 845	19.4	China	27 521	21 235
Japan	23 720	21 772	8.9	Japan	13 861	13 338
South Korea	9 703	9 600	1.1	South Korea	8 476	7 095
Taiwan	5 809	5 324	9.1	India	6 365	4 194
Singapore	4 703	3 969	18.5	Australia	5 488	5 024
India	4 175	3 408	22.5	Hong Kong	4 818	4 092
Malaysia	4 008	3 758	6.6	Singapore	4 793	4 272
Thailand	2 691	2 481	8.5	Taiwan	4 530	4 286
Hong Kong	2 340	2 024	15.6	Malaysia	3 674	3 200
Philippines	1 912	1 922	-0.5	Thailand	2 232	2 048
Total ASEAN	18 273	16 348	11.8	Total ASEAN	14 525	12 657
Total Asia-Pac.	117 409	103 074	13.9	Total Asia-Pac.	87 016	73 277
Total Germany	731 379	628 087	16.4	Total Germany	896 048	786 265

Chart-20

Source: Annual Review 2007 Indo-German Chamber of Commerce

It is clear from the chart that India has not been (at least till 2004) as preferred and profitable investment market for German enterprises. A number of factors including political instability, policy inconsistencies and ill-equipped infrastructure are reported to be among the impediments frustrating FDI flow to India.

According to the statistics published by the German Asia-Pacific Business Association (OAV) in 2006 Indian exports to Germany grew 22.55% while imports increased phenomenal 51.8%. India moved to the 6th position climbing from 7th in terms of Volume of goods exported to Germany. A healthy growth was also registered by Indian exports of electro-technology to Germany which registered a growth of 22% over the year 2005-06 to EURO 87 million .

On the other hand India toppled Australia, Taiwan & Singapore and notched the 7th position in 2005 and to the 4th in 2006 with respect to imports from Germany.

Though the volume of goods traded by top 3 countries like China, Japan or South Korea with Germany is several times more than India's trade with Germany the highest growth rates 22.5% with respect to imports and 17.8% with respect to imports could be seen in case of India among the top trading partners of Germany. According to a list of German's trading partners published by Federal Statistical Office in Germany India won the 29th most important suppliers for Germany in 2006 moving up from 31st position in 2005 and in terms of German exports India jumped to 29th in 2006 from 36 in 2005 with imports from Germany growing at phenomenal rate in 2006.

Main Trading Partners for India

Main trading partners for India				
Ranking	Main exporters to India (Apr.'06-Mar.'07)	% share	Main importers from India (Apr.'06-Mar.'07)	% share
1.	China	12.9	U.S.A.	14.9
2.	Germany	9.4	U.A.E.	9.3
3.	U.S.A.	9.2	China	8.8
4.	Switzerland	8.8	Singapore	4.8
5.	Australia	5.1	U.K.	4.4
6.	Japan	3.4	Hong Kong	3.7
7.	Singapore	3.3	Germany	3.2
8.	South Korea	3.2	Italy	2.9
9.	Belgium	3.1	Belgium	2.8
10.	U.K.	3.1	Japan	2.2

Chart-21

Source: Indo-German Chamber of Commerce

It's at the same time quite interesting to note that despite ups and downs in German FDI to India, German has however remained a significant FDI source from the Indian point of reference.

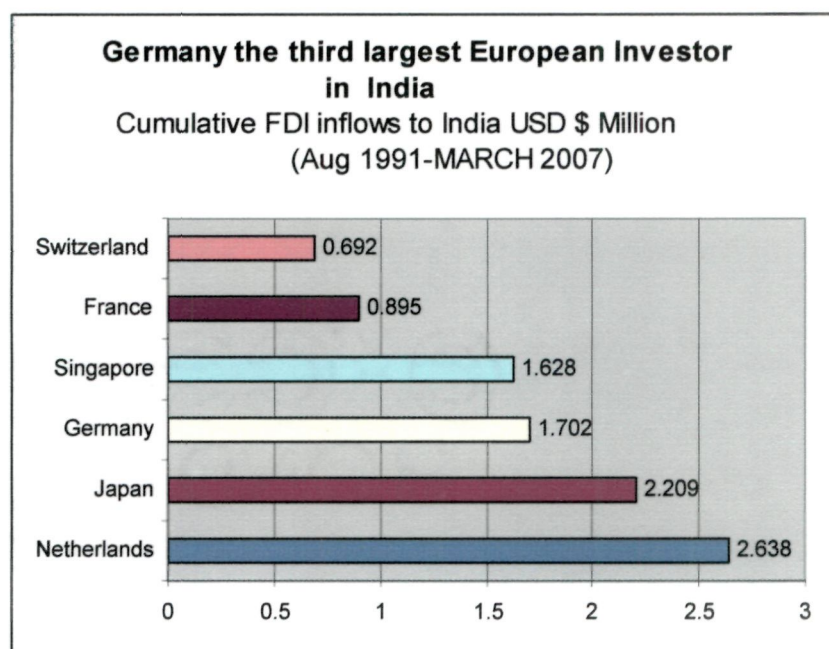


Chart-22

Source: RBI 2007

According to the list of German Trading partners published by Federal Statistical office in Germany, India was the 29th most important suppliers for Germany in 2006 moving up from the 31st position in the year 2005. And in terms of German exports India jumped to 29th position from 36th rank in 2005 the obvious reason could be cited from the earlier discussions that the German trade with India showed phenomenal growth in 2006.

During the 1990s, Germany positioned first among European Investors in India. Yet FDI flow from Germany dwindled substantially from 2000 onwards. Still Germany slots in the sixth place among top foreign investors in India during 1991-2004. Also that, for a long time, actual FDI has been short of

sanctioned FDI in India's case (chart – 23) this can be explained in terms of perceived environmental signs in the business and economic matrix of Indian markets mainly emanating from procedural, policy related, political or case institutional constraints inhibiting the rate of execution of trade investment plans.

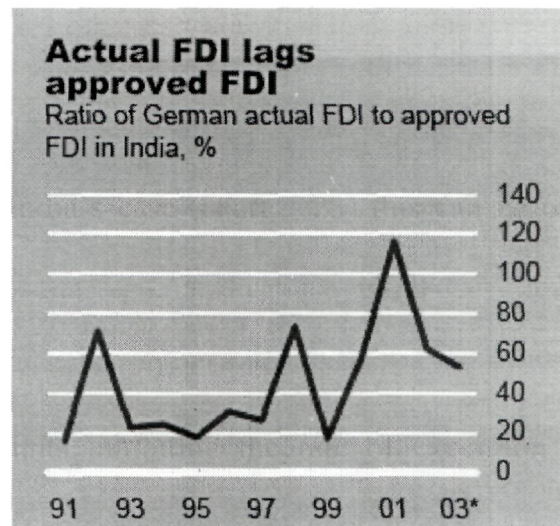


Chart-23

Source: Deutsche Bank Research estimates 2005

Source: Secretariat for Industrial Assistance Govt. Of India

All these needs to be addressed more seriously at the policy and political level not only with a view to rationalize the constraints in the process of trade inflow from Germany in particular but from the entries globe in general. Incidentally, the findings of intermittent surveys by the Deutsche-Industries-un Handelskammestag (DHK) among German investor are quite in line with those of S & P and Moody as also those of the Federation of Indian Chambers of Commerce and Industry (FICCI). For existence, in FICCI's 2006 survey, 86% of the respondents suggested their plans to further augment their investments in

THESIS

India subject to-systems. Infrastructure and procedural hassles and delays-all too-common imperatives confronting foreign companies at present at present in the country.

Obstacles in the process of German FDI to India

There are still some trade obstacles in the process of German FDI to India in particular and global FDI in general especially in IT sector

(1) Procedural Constraints:

It refers to delays in procedures and official formalities leading to unnecessary delays or in brief red-tapism. As per a study by the confederation of Indian Industries (CII), an average power project needs 43 central government clearances and about 57 from the state government level. Accordingly, the number of clearance for an average mining project many involve 37 central government approvals and 47 at the state level non-cooperative government staffs and lack transparency in the laws and procedures, there is also a lack of clear documentation and policies.

(2) Callous Labour Laws and High Tax Rates:

Labour markets in India are rigid and it results into contractual / Ad-hoc or temporary recruitment of workers as a result employers can't rehabilitate employees even on account of trade reasons.

(3) Below standard infrastructure:

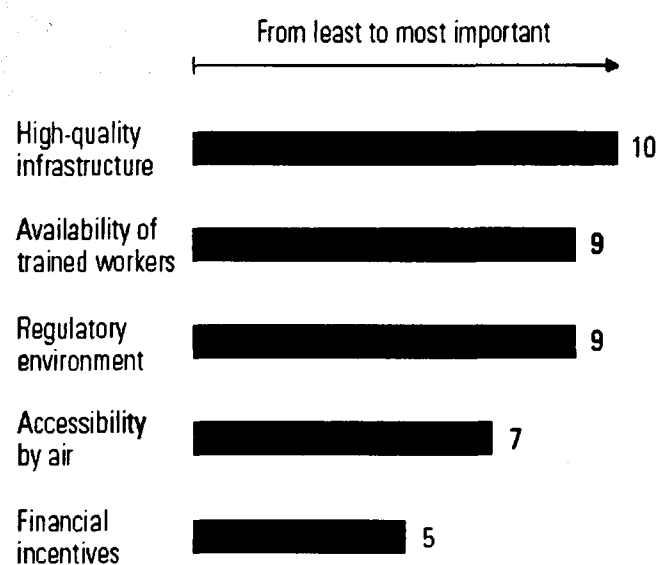
The state of infrastructure like transportation, communication, security, Warehousing, power, water insurance or banking aids to manufacturing and trade processes in Indian is deplorable. It needs special attention from the local

and Central government in order to realize the full potential of any business process. Approximate 43% of the respondents to the FICCI's survey 2006 regarded India's ports and airport amenities as sub-standard.

A McKinsey survey of 2004 incidentally verifies the finding of FICCI's survey as analyzed and mentioned in the preceding sections of the chapter on obstacles to FDI flow. (See Chart 24)

When money matters least

Factors affecting choice of offshore location¹



Source: The McKinsey Quarterly, 2004 Number 1.

Chart – 24

According to McKinsey Global Institute (MGI), research there could still be a fourth obstacle to any FDI flow (valid in case of India as well to be quoted at the juncture).

(4) Protection of local industry and maximization of spillovers to the domestic economy:

According to MGI the most popular restriction is treat content requirement, which forces foreign companies to purchase a certain percentage of inputs locally, and joint venture requirement. MGI research casts doubt about the effectiveness of such measures. Although it is done mainly to advance and protect the local industry and serve over-all economic interest but in most cases, they are not needed to develop a supplier industry or to help local companies learn from foreign ones.

The MGI research recommend that to get the most from FDI, a developing nation like India should abandon its incentives and regulations and concentrate on strengthening economic foundation in particular, stabilizing the economy and promoting competitive markets. Macroeconomic instability discourages long term investment by making demand, prices, and interest rates difficult to forecast.

Hence competition is essential to diffuse the impact of FDI, for without competitive markets, the entry of foreign players has little effect on inefficient domestic incumbents and their productivity. To promote competitive markets, developing nations must reduce restrictions on foreign investment, lower impact tariffs, streamline the requirements for starting new business, and encourage new market entrants.

Another important way of promoting fair competition is to crash down on companies in the informal economy (or ‘gray’ market), especially in the IT sector where there is lot of piracy of software and content. Finally, India must continue to build a strong infrastructure, including roads, power supplies, and ports that in turn could become an important prerequisite for the development of the IT-and business-process-outsourcing industry.

(5) India a late riser to FDI due to its inward looking policies since 1947:

Further according to Francoise Hay, university of Rennes, (paper presented in an international conference at sciences del’ Homme, Paris, 28-29 September 2006) India has been by birth an inert and regulated receiver of imported technology and capital (see chart 23) go low German FDI to India is part of its internal syndrome towards global participation in domestic processes and systems. The Indian planning, nationalizations, on import substitution policy, where tax structure was complex and FDI conditionally tolerated (for internal consumption and with minority shares).

Most of FDI come from a few nations. Between 1991 and 2005, investment of 10 nations accounted for 71 percent of FDI, the main investors being the US, the Netherlands, Japan and the UK. (See tabular chart 11). Between 1991- 2005, Mauritius is the biggest source of foreign “direct investment. This is attributed to factors like common kinship, culture and a facet policy of agreement over avoiding double tax regime with India. Factors like these have been absent in case of German FDI to India.

Apart from Mauritius, the US is the first investor in India. It contributed about 13 percent of total inward FDI between 1991 and 2005. This attributed to the two countries close relations the US is the largest trading partner of India and a broad Indian Diaspora lives in it

Country	Aug. 1991- March 2002	2002- 03	2003- 04	2004- 05	2005- 06	2006- 07	Cumulative inflows Aug 1991-MARCH 2007
Mauritius	6.632	0.788	0.567	1.129	2.570	6.363	18.147
USA	3.188	0.319	0.360	0.669	0.502	0.856	5.894
U.K	1.106	0.340	0.167	0.101	0.266	1.878	3.857
Netherlands	0.986	0.176	0.489	0.267	0.076	0.644	2.638
Japan	1.299	0.412	0.078	0.126	0.208	0.085	2.209
Germany	0.908	0.144	0.081	0.145	0.303	0.120	1.702
Singapore	0.515	0.038	0.037	0.184	0.275	0.578	1.628
France	0.492	0.112	0.038	0.117	0.018	0.117	0.895
South Korea	0.594	0.039	0.024	0.035	0.060	0.071	0.823
Switzerland	0.325	0.093	0.045	0.077	0.096	0.056	0.692
Total FDI inflows	23.829	3.134	2.634	3.754	4.549	15.726	54.528

Source: RBI (Reserve Bank of India), 2007 April

Chart-25

Trade Stimuli and Motivational Factors to FDI in India

Despite being a latecomer to FDI, India is gathering fast momentum in this context. There is a boom in FDI inflow since 2000. FDI received by India's quite recent 42.4% if it has been carried out since 2001, with a year on year increase of 26.5% in 2003 end of 23.3% in 2004. In 2006, FDI reached a record level of \$16 8 mn, and India held the 8th rank among developing countries to attract FDI (behind China, Hong Kong, Singapore, Turkey, Mexico, Brazil and S. Arabia). (See tabular chart 25).

FDI Inflows (\$ Million)

	1998	1999	2000	2001	2002	2003	2004	2005	2006
World	690 9	1086 7	1387 9	817 6	716 1	632 2	742 1	945 7	1305 8
Develo ping	194 0	231 9	252 4	219 7	219 7	166 3	233 2	314 3	379 0
India	2 6	2 2	2 3	3 4	5 6	4 3	5 7	6 7	16 8

*Annual Average

Score: WIR, 2007: Transnational Corporations, Extractive Industries & Development and other WIR's

Chart-26

Officially, at the end of 2006, India's stocks of FDI inflow amounted to \$ 50 68 mn, that is only 1.6% of investment received by developing countries. The stocks represented 5.9% of GDP in 2006, a small ratio compared with

developing countries average (26.4%). We however notice that Indian stocks were 23 times greater in 2004 and 30 times greater in 2006 than in 1990.

FDI in world Stock

	1990	2000	2004	2006
World	1 779 1	5 810 1	8 895 0	11 998 8
Developing	364 6	1 707 6	2 226 0	3 155 8
India	1 657	17 517	38 70	50 680

Source: WIR, 2007: Transnational Corporations, Extractive Industries & Development.

Chart-27

In 2006, India held the 12th slot as compared to 15th in 2004 in terms of inward FDI stock among developing economics (WIR, 2005 & 2007). (See Chart 25)

This radical shift in global FDI to India has taken place owing to several Indian comparative advantages. A number of factors provide the needed fillip and impetus to the FDI inflow in the recent years.

COMMENTS AND OBSERVATIONS

India is now the hotspot for investment as 70% of foreign investors are making profits from their India operations and 83% are considering expansion of business. Most of the investors including Germany find the Indian market as a high growth market and express confidence that the 8% GDP growth would

be surpassed in 2006-7 as well. This prognosis is revealed by **FICCI's annual Foreign Direct Investment (FDI) Survey 2006.**

Through the analysis and data one could evidence the concept and material significance of FDI to the Indian economy and recognise Germany as of the major source of FDI and trade to India. The sectoral and Regional analysis reveals that FDI inflows from in India has been gradual but has not been upto the potential of the Indian market and German Investors.

Although Germany has been the oldest and prominent trade partner for India from the European Union but when it came to Investments in the Indian IT sector German companies were shy probably because of strong labour-union, quality-driven market and an overall conservative attitude towards outsourcing.

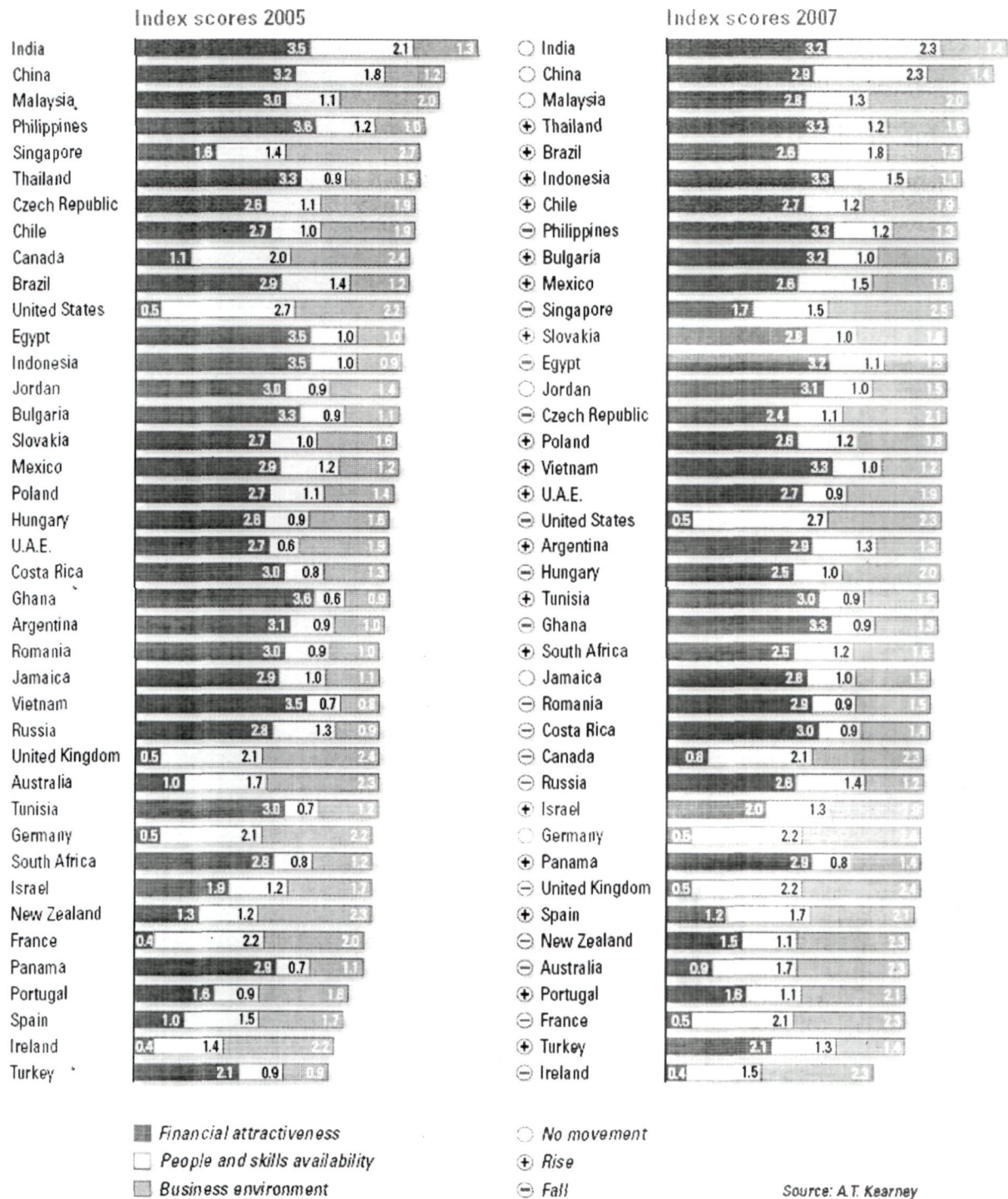
At first German investors turned to India IT sector simply because of cheap labour and still German companies were comparatively reluctant on the bandwagon. But now the whole scenario has changes during last five years. Now with the Indian IT industry posting a growth rate of such as 32% in 2006-2007 India has become serious global contender and a highly reliable quality provider. Seeing the rift of global giants towards Indian IT & IT-enabled market German companies want to be in action.

So with the aim to reap advantage and earn profits German push into the IT field was backed by long-term trade relations and open channels of communications. Let us analyze the various factors those are attracting German inventor's in particular and global investor's and their perspective in general.

1. Cost reduction:

The 2005 survey by the Deutsche. Industrie – and Handeis Kammentag CDI HK, 2005) regarding German companies foreign investment plans cited production and operating cost reduction as their prime motivators to invest abroad (See Asuncion- Mund 2005) and Bergheim, etal (2005) fro details). This comes on the back of their urge to have their competitiveness. India's advantages in this context are clearly favourable. In AT Kearney's 2005 & 2007 ranking of offshore location globally, India out-ranked China by a wide margin, mainly because of its low-cost vantage and it's huge pool of high – skilled labour force (see chart 28). India's cost benefits comprise skilled and non- skilled worker categories, also professional levels as well.

Comparing the 40 countries included in both the 2005 and 2007 Index



OFFSHORING FOR LONG-TERM ADVANTAGE | A.T. Kearney

(Chart 28)

THESIS

2. Entry and reach to new, high- return markets:

The size of the Indian market has also become a reason for Germany's interest in India. With the young demographics of India, changing life- styles, Sociographics, rising disposable income (see chart –29), India's integration with the world economy make it the growth star matrix among 34 developed and emerging market countries according to a recent comparative study by Deutsche -Bank Research. (Asuncion- Mund 2005) and Berghain , etal 2005.

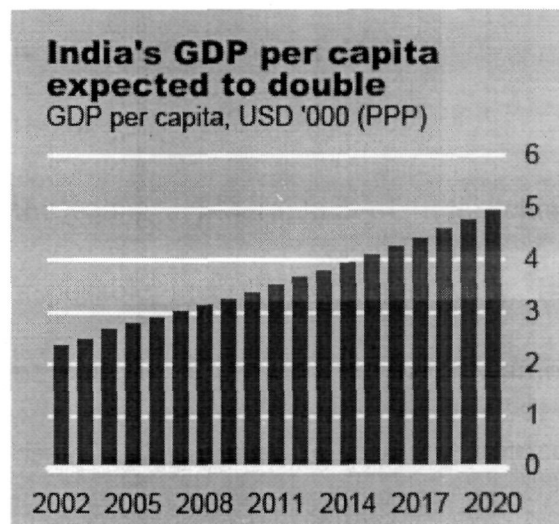


Chart-29

Source: Dentsche-Bank Reseach. (Asuncion- Mund 2005) and Berghain , etal 2005 (Comparative Study)

In this regard, the retail is an exciting opportunity, a segment although unit has remained relatively closed to FDI. In AT Kearney's 2004 Global Retail Development index, India earned the second highest spot among 30 emerging markets on the most lucrative markets, ranking behind Russia and just ahead of China. It also anticipates the sector to grow 30% over the next 5 years, so it is regarded as one of India's sunrise sectors..

(3) Availability of high-Skilled workforce and increasing productivity:

Every year since 2.3 million Indian students graduate with bachelor degrees and about 300, 000 of them happen to be engineers. This is an edge to India in the global pool of intellectual labour. The economy is much more efficient now than in the past. A study by Rodrik and Subramanian (2004) of trends in total factor productivity growth (TFPG) in Indian brings to the notice. This shows how Indian open economic policies in recent years have impacted productivity in India.

The reforms embarked upon since the 1980s – particularly the rapid liberalization of the country to FDI in the 1990s –have had a positive effect on total factor productivity (Something we have already tried to validate in over previous chapter in establishing hypothesis 1 of our research work). Further between 1980 and 1999, their contribution to growth came to par with that in East Asian countries and was just slightly behind China. Over this period, foreign technologies and efficient practices began to penetrate, forcing Indian entrepreneurs to seek efficiency –enhancing strategies as a consequence. The removal of import barriers after 1991 helped unleash the competitive forces in the economy. In short continued economic reforms have invigorated TFP in India and led to higher GDP growth.(see chart-30 for estimates)

4. Manufacturing activity picking up:

In addition to India's high-skilled workforce, its long history in manufacturing offers superior outsourcing opportunities for German companies. Due to poor infrastructure, ground hassles and certain bottlenecks India has lagged behind its Asian neighbors as a manufacturing hub. According to McKinney Study, this will change dramatically, however, as ever more MNC'S start to look beyond India's infrastructure gap and focus on its skill-intensive availability. McKinsey, the global consulting company, identified fabricated metal products, transportation components, electrical and electronic equipments, services, telecom equipments and Pharma products in general are prime and lucrative manufacturing sectors in which India will play a commanding role in global outsourcing. Where as in another study of 2004 it has identified consumer electronic and information technology as unambiguously positive including BPO and automotive as the most positive sectors (see chart 31).

Sectors attracting highest FDI inflows (1991-2005)

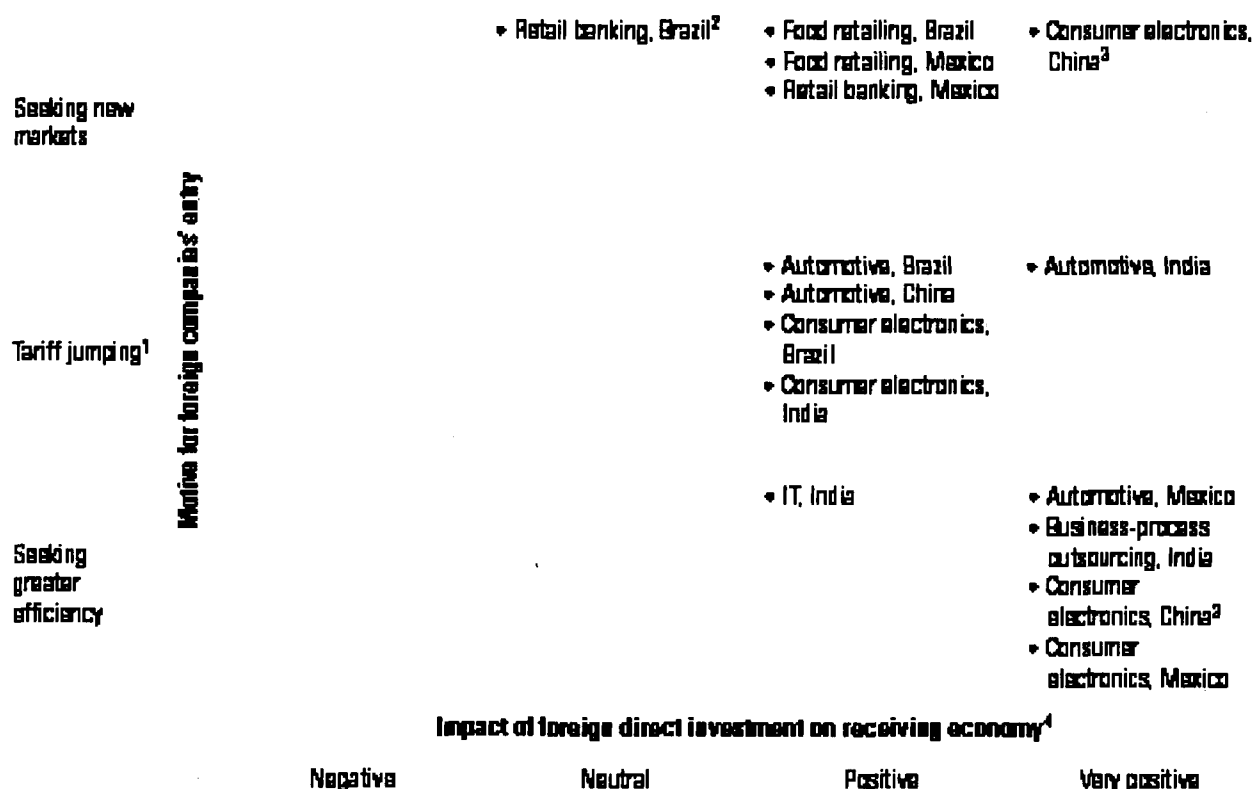
(\$ billion)

Sectors	Cumulative FDI Inflows 1991-2005	Cumulative FDI Inflows 2002-2005
Electrical equipment	4,862	2,734
Transportation Industry	3,124	1,110
Services	2,908	0,462
Telecommunications	2,863	0,624
Fuels (power, oil refinery)	2,514	0,416
Chemicals (other than fertilizers)	1,887	0,538
Food processing industry	1,173	0,222
Drugs and pharmaceuticals	0,946	0,552
Cement and gypsum products	0,746	0,483
Metallurgical Industries	0,624	0,393

Source: Reserve Bank of India (2007)

Chart (30)

Unambiguously positive



¹Market-seeking approach whereby company gains access to new market (protected from imports through tariff and other trade barriers) by establishing production in that market.

²One reason foreign banks in Brazil had only limited impact on productivity was that best local banks were already highly efficient, so entry of foreign players left fewer opportunities to improve performance.

³Companies in this sector had 2 motives for entry.

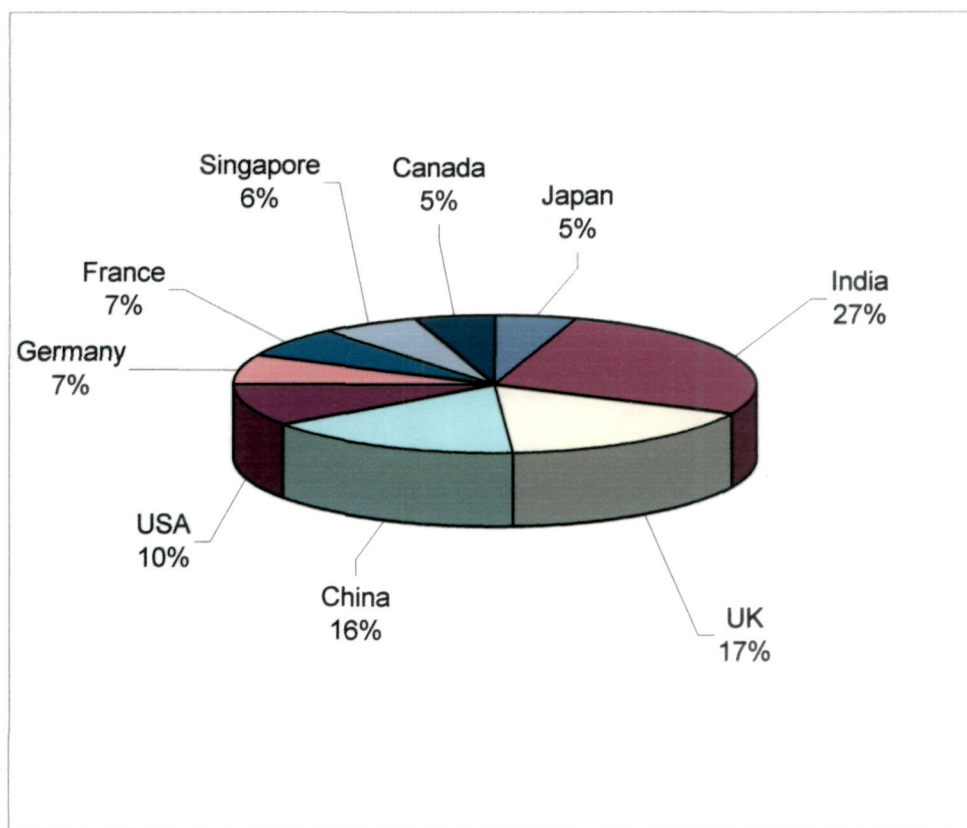
⁴Qualitative measure based on combination of productivity, sector output, level of employment/wages, and consumer prices/ product selection, among others.

Source: The McKinsey Quarterly, 2004 Number 1.

Chart-31

The attraction of Indian market in term of its IT and software potentials and ability to attract subsequently FDI project and inflows in these very sectors is substantiated by another study by OCO consulting (2005) (See chart -32). Deutsche Bank has marked India as its no.1 destination for software development, IT & IT enabled services (Source: Global Strategy Report 2006, Deutsche Bank. Germany's leading magazine Der Spiegel has cited India as No.1 destination for offshore development for German software companies.

IT & Software: Top locations by number of projects, Jan 2002- Aug 2005



(Chart- 32)

As a logical corollary, German firms have also displayed keen interest in Indian manufacturing sector and as per the data table (presented previously in this previous chapter for hypothesis I) a major chunk of the German FDI inflow is directed towards these very sector only including that of IT and IT enabled services such as BPO, KPO, internet related or value added services, telecom, electronic and electrical hardware along with other sectors such as automotive, Pharma, fertilizer among others.

Where does that leave the services sector?

It may not come as a surprise that German investors are increasingly tapping India's knowledge-based expertise opportunities abroad in software production, IT services such as back-office processing, legal and medical transcription and content development, biotechnology, tourism, health and financial services sectors also offer attractive avenues. There is also a tremendous potential in knowledge-process-outsourcing (KPO) and India is moving up the value chain from Business Process outsourcing (BPO) to KPO. A report by ELSEVIER, a global business intelligence and market research company, predicted India to be the world leader in KPO by 2010, capturing more than 70% of the business. The most sought after professionals will be well versed in data search and management, followed by biotechnology and pharmaceuticals. This will give the services sector's share of FDI a boost, but will unlikely outstrip the manufacturing sector.

Being India's oldest trade partner from the western union Germany is all set to secure a niche in the IT field. To push things forward German giants including Siemens, Bosch and SAP AG have launched major operations and partnership in India and the push is being backed by long-term trade relations and open channels of communications.

Some of the prominent German companies present in the services sector are Metro (wholesale trade), Allianz (insurance), SAP (Software), Deutsche Post's DHL subsidiary (logistics) and TUV (Certification). Bosch has announced plans to invest 170 million Euros by 2010. Siemens also announced a plan to invest upto US\$100 million in India over the next three years. The mobile company

has a plan to build a manufacturing plant for wireless network equipment in Tamil Nadu.¹¹⁸ **SAP AG**, the world's largest business software maker has announced its plan to invest Euro 0.76 billion in India over the next five years. **Siemens** has plans to invest Euro 600 million in the next three to four years for setting up new factories and expanding its existing capacities in the country.¹¹⁹

The FICCI FDI Survey 2006, amongst 76 current foreign direct investors, across various industries and verticals, from all around the globe having their operations in India, with company turnover ranging between Rs. 1 crore to Rs. 100 crore and those with turnover above Rs. 100 crore.¹²⁰

Microeconomic determinants such as the rate of return on investment, market growth and availability of skills and manpower do not seem to pose immediate risks to investors. In most sectors, market penetration is still low and, therefore, profit margins are not expected to narrow soon. The favorable outlook for growth and the abundant supply of skilled labour were already discussed above. Regarding the stability of the exchange rate, the Reserve Bank of India has been able to maintain currency stability, even in periods of regional or global turmoil. More decisive efforts to rein in the fiscal deficit would ensure the viability of the central bank's conduct of exchange rate policy. The Survey reveals that a vast majority of current foreign investors are succeeding in terms of profits and realizing the profitability targets set for their

¹¹⁸ www.atmonline.org

¹¹⁹ <http://www.indianembassy.de/incl/bilateralinvestments.htm>

¹²⁰ FICCI foreign Investor Survey Report 2006

Indian operations. Almost 7 in 10 foreign investors have reported that they are making profits in their Indian operations. 91% of the companies making profits say that they have been successful in meeting their profitability targets in India. An overwhelming 87% of the respondents echoed the view that there exist opportunities for greater FDI in India. The fact that foreign investors are looking at India as an important market for the future is reinforced by the fact that nearly 83% of the respondents are considering expansion of their Indian operations.

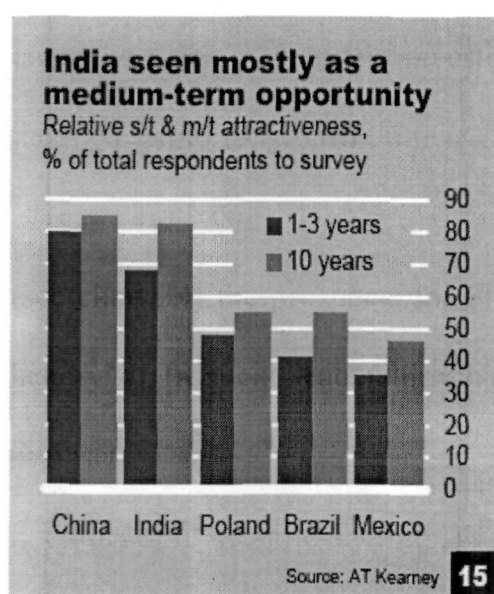
The FICCI FDI Survey notes that the perception about India as a manufacturing base has reasonably improved over the last two years. In FICCI FDI Survey 2005, about 32% of the participating companies rated India as an attractive manufacturing base. In the present survey this proportion has increased to 48%. It states that the Indian market is becoming increasingly competitive. The proportion of respondents citing 'intense competition' as a characteristic feature of the Indian market has gone up from 59% in FICCI FDI Survey 2005 to 67% in FICCI FDI Survey 2006.

With many new players entering the Indian market and with both domestic and foreign players in a scaling up mode, a noticeable crunch in the availability of skilled manpower has been reported. The proportion of respondents citing availability of skilled manpower in the country as 'good' has fallen from a high of 67% in the last year's survey to about 52% in the present survey. Although the foreign investors have expressed some concern about the availability of qualified manpower in country, the investors have a very good opinion about the skill sets possessed by individuals in their respective organization's executive management, professionals and operations management cadre.

The Survey notes that in terms of satisfaction with the efforts made by the government to attract greater FDI into the country, current investors gave the government machinery a rating of 'average'. There has been a sharp increase in the proportion of respondents rating government efforts to attract FDI as 'average' from 43% in FICCI FDI Survey 2005 to 83% in FICCI FDI Survey 2006. Several companies have suggested that government should improve its performance in terms of its outreach efforts to court foreign investors.

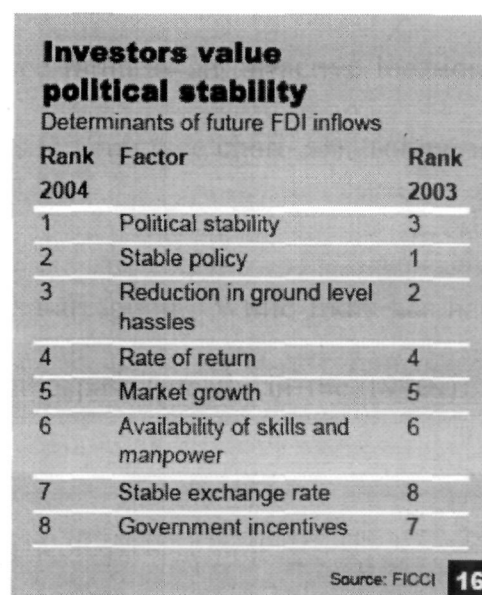
A look at the evaluation of the infrastructure facilities in India by the foreign investors shows that foreign investors are most dissatisfied with the condition of roads and highways in the country. 54% of the companies have rated the condition of roads and highways in the country as 'bad'. The power situation and the situation at the country's ports also deserve careful attention of the government with 42% of the participating companies rating the quality of power and port facilities in the country as 'bad'. Nearly 40% of roughly 20,000 German firms surveyed by Deutsche Industries- and Handelskammertag (DIHK) expressed their concrete plans to tap new markets abroad. Of those who plan to increase their investments abroad, many are considering transferring capital and knowledge-intensive functions abroad such as administration and R&D. This bodes well for India's large knowledge-based sector where high skills are complemented by cost benefits. The findings are generally in line with the perception of foreign companies already operating in the country.

At the same-time might take several years before large investment flows enter the country, as many investors still see India as an attractive location in the medium to long term but less so in the short run (see chart-33). Taking into account the factors which investors consider key for their investment decision (see chart 34) the prospects for FDI in India are good. While India has had a history of frequent leadership changes in the past (mostly in the 1990s), the mindset to usher in further reforms cuts across parties and the process of liberalization - despite occasional setbacks - seems irreversible.



Source : AT Kearney Index 2006

Chart-33



Source: FICCI FDI Survey 2005

Chart-34

Conclusion

The three major industrial houses (CII, ASSOCHAM, FICCI) and Indo-German Chamber of Commerce, Indian Planning Commission and the World Bank all have similar recommendations for FDI. India still needs to formulate a comprehensive policy which not upto the international standards somehow even after 16 years of economic reforms of 1991.

The FDI inflow from Germany in India has been gradual but has not been the main destination of German investors. The low figure of FDI inflows to India from Germany if compared with other developing nations speaks the volume that how conservative the German investors have been when it comes to IT sector owing to several factors that make India a far less attractive ground for direct investment than its potential.

To be more specific if we talk about IT sector in addition to India's poor performance in terms of competitiveness, quality of infrastructure and certain procedural constraints, conservative attitude towards outsourcing kept German investors away from investment in the Indian IT sector. Whatever investment were coming from Germany in IT sector were sector specific and concentrated in bigger states and cities like Maharashtra, Delhi, Karnataka etc.

Microeconomic determinants such as the rate of return on investment, market growth and availability of skills and manpower do not seem to pose immediate risks to investors coming to the IT sector. In most sectors, market penetration is still low and, therefore, profit margins are not expected to narrow

soon. The favorable outlook for growth and the abundant supply of skilled labour were already discussed above. Regarding the stability of the exchange rate, the Reserve Bank of India has been able to maintain currency stability, even in periods of regional or global turmoil. More decisive efforts to rein in the fiscal deficit would ensure the viability of the central bank's conduct of exchange rate policy. Nearly 40% of roughly 20,000 German firms surveyed by Deutsche Industries- and Handelskammertag (DIHK) expressed their concrete plans to tap new markets abroad. Of those who plan to increase their investments abroad, many are considering transferring capital and knowledge-intensive functions abroad such as administration and R&D. This speaks high for India's large knowledge-based sector where high skills are complemented by cost benefits. The findings are generally in line with the perception of foreign companies already operating in the country.

According to Boston Consulting Group Survey 2006 90% of MNCs in India are making profits and out of these 60% of these profit-making MNCs earned higher returns in India than their global average. To add more with the Indian IT industry posting growth rate of such as 32% in 2006-07 IT filed has become a large point of interest and it is a perfect time for German investors to try their proves in the Indian IT sector. So there are no reasons why Germany should lack behind.

Finally, the government's pursuit of aggressive reforms in the early 1990s included plenty of incentives for foreign investors. Many more are being worked out, including the opening up of more special economic zones, as well

as increasing or eliminating caps in a number of sectors. In sum, India's intrinsic attributes, including a large population, favorable demographics, a wealth of skilled professionals and the march toward further liberalization, place it ahead of many emerging market countries as a favorable FDI destination. German companies should, and probably will, seize this opportunity in a more decisive way.

Chapter-5

Problems, Observations and Suggestions

Problems , Observations and Suggestions

India's relation with Germany has been centuries old and from Indian perspective Germany has been an important and prominent source of FDI. From the German investor's or any other investor's point of view there is lots of scope for trade and FDI investment in different fields especially IT sector, Software development and pharmaceuticals , health products etc.

In the previous concluded Chapter IV an attempt has been made to analyse various aspects German FDI investments in India and the response of German investors especially in the IT sectors. One the major characteristics and feature that have come into light that German investors have shown special interest in Technical Collaborations which are usually available in bigger states and their metropolitan cities. We have already discussed this aspect at length in Chapter IV sighting reasons behind this trend among German investors. This inclination has been noticed more towards metropolitan and some big cities probably because of more ground hassles and inflexible labour laws, poor infrastructure, relatively high taxes, low availability of technical staff etc.

Major Obstacles and Reasons for low FDI inflows in India

Taking into consideration of the fact that India has a huge and fast growing domestic market there is every reason to believe that continued reforms, economic policies, and institutional reforms a better environment can be created that would be conducive for private investment and economic growth and substantially large volumes of FDI will flow to India.

The low figure of FDI inflows to India from Germany if compared with

other developing nations speaks the reality that there are several other factors that make India a far less attractive ground for direct investment than its potential. To be more specific if we talk about IT sector in addition to India's poor performance in terms of competitiveness, quality of infrastructure and certain procedural constraints some other factors like strong labour unions, conservative attitude towards outsourcing kept German investors away from investment in the Indian IT sector. There are still some trade obstacles in the process of German FDI to India in particular and global FDI in general.

1) Image & Attitude:

India is a multicultural society and a large number of multinational companies do not understand the diversity and nature of different layers of the society. Though economic reforms introduced the Foreign Direct Investment (FDI) in the country since nineties, but it does not seem so far to be really evident in our overall attitude.

Although Germany is the largest investor from European Union but when it comes to IT sector German investors were shy and their conservative attitude towards outsourcing and quality driven market kept them away from investing in the Indian market.

Future profit expectation is the basic and fundamental reason for all the foreign as well as domestic investments. The economy only gets benefited if the economy policy fosters competition, creates a well functioning modern regulatory system and discourages artificial monopolies by the government through entry barriers. A recognition and understanding of these facts can

result in a micro positive attitude towards FDI.

2) Procedural Constraints:

Unlike the FDI regime in India for sectoral investment is still quite restrictive when we talk about IT sector. Foreign ownership of between 51 and 100 percent of equity still requires a long procedure of governmental approval. Bureaucracy and red tape topped the list of investors concerns. Among three stages of a project:

- a) General Approval
- b) Clearance
- c) Implementation

The second stage, clearance, is most oppressive. Three- fourth respondents in AT Kearney survey indicated that the post-approval clearances connected with investment were the most affected by India's red tape. As per the study by the Confederation of Indian Industries (CII), an average power project requires 43 Central Government clearances and 57 State Government level clearances. Accordingly, the number of clearances for an average mining project involves 37 Central Government approvals and 47 at the State Government level.

Multiple approvals, excessive time taken and long lead times of up to six months for licenses for duty free exports lead to loss of investors confidence despite of a considerable promising market size. According to Boston Consulting Group, investors find it frustrating to navigate through the tangles of bureaucratic controls and procedures. One had slowed levels of realization

of FDI inflows vis-à-vis the proposal cleared (CII).

Although the realization rate is quite satisfactory in IT sector as compared to other sectors, it still remains a matter of concern. The precise reason for the low levels of realization is the post approval procedures. At the state and central level there is also lack of transparency in the laws and procedures managed by non-cooperative government staffs.

3) Below standard infrastructure:

Poor infrastructure is found to be the most important constraint affecting the productivity of the economy as a whole and hence its GDP/per capita GDP. German investors or any foreign investors are concerned about a number of problems with infrastructure especially when it comes to investment in the IT sector. 54% of the respondents of the FICCI Survey 2007 have rated the condition of India's roads and highways as below standard while 42% of the participating companies have rated the quality of India's power, port and airports amenities as sub-standard.

It also reduces the comparative advantage of industries that are more intensive in the use of such infrastructure e.g engineering and construction industries. Inadequate and poor quality infrastructure raise export cost vis-à-vis global competitors having better quality and lower cost infrastructure. As a foreign direct investor planning to set up an export base in developing economies has the option of choosing between India and other locations with better infrastructure, India is handicapped in attracting export oriented FDI. Other than Inadequate and poor quality roads , rail roads and ports certain

unclear laws, rules, regulations relating to infrastructure adds more to the Indian misery.

4) Callous labour laws:

Labour markets in India are quite rigid and when it comes to skilled staff for IT sector it results into contractual / Ad-hoc or temporary recruitment of workers so employers can't rehabilitate employees even on account of trade reasons. Large firms in India are not allowed to retrench or layoff any workers, or close down the unit without the permission of the state government. Most importantly, the continuing barrier to the dismissal of unwanted workers in Indian establishments with 100 or more employees paralyzes firms in hiring new workers. Labor-intensive manufacturing exports of IT hardware and Software require competitive and flexible enterprises that can vary their employment according to changes in market demand and changes in technology, so India remains an unattractive base for such production in part because of the continuing obstacles to flexible management of the labor force.

5) Policy Frameworks:

Most of the problems faced by the investors arise because of domestic policy, rules & procedures and not the FDI policy & procedures.

5.1 Lack of clear cut and transparent sectoral policies for FDI:

Expeditious translation of approved FDI into actual investment would require more transparent sectoral policies, and a drastic reduction in time-consuming red-tapism.

5.2 FDI Policy

There are certain FDI regimes encompassing certain restrictions for the FDI investors. India with one the most transparent and liberal FDI regimes among the developing economies has few banned sectors and some sectors with limits on foreign equity proportion. The entry rules are clear and well defined and equity limits for foreign investment in selected sectors such as Information Technology and telecom quite explicit and well known.

Germany being one of the oldest European trade partner is quite aware of all sectoral policies so it would help them to secure niche in IT field but our promotional effort is quite often of a general nature and not corporate specific. Inspite of several surveys indicating India as the most promising and profitable destination, in several cases the foreign investors are discouraged even before they considers an investment prospects.

5.3 Domestic Policy:

The domestic policy framework affects all the investors either Indian or foreign. FDI investors who are coming into India for the 1st time faces certain hurdles at different levels like laws, regulatory system and Government monopolies

All these restrictive policies discourage entry and exit and performance of foreign investors. Weak credibility of regulatory system and multiple and conflicting roles of agencies and government has an adverse impact on new FDI investors, which is greater than on domestic investors. According to some consultants and experts, in banking sector, controls on activity dampen FDI

inflow. The absence of product patents in the chemical sector has reduced inflows into drugs and pharmaceuticals sectors.

7) Limited scale of export processing zones:

There has been a very modest contribution of India's export processing zones to attracting FDI and overall export development. India's export processing zones need revision of policy as it lacks dynamism because of several reasons, such as their relatively limited scale; the Government's general ambivalence about attracting FDI; the unclear and changing incentive packages attached to the zones; and the power of the central government in the regulation of the zones for the major responsibility of local and provincial government. Ironically, while India established her first EPZ in 1965 compared with China's initial efforts in 1980, the Indian EPZs never seemed to take off -- either in attracting investment or in promoting exports.

8) High corporate tax rates:

Corporate tax rates in East Asia are generally in the range of 15 to 30 percent, compared with a rate of 48 percent for foreign companies in India. High corporate tax rate is definitely a major disincentive to foreign corporate investment in India.

Besides, rates of corporate taxation in India are pretty higher by Asian norms. This must be noted that the tax rate of 41% is applicable only on branch offices of foreign companies and not on companies incorporated in India. Branch offices are not allowed to go in for operations (manufacturing) in India. Only concerns incorporated in India can undertake manufacturing activities and

the effective tax rate for such companies is just 33%. Those operating in a SEZ (special economic zone), however, are given special tax incentives.

9) High tariff rates by international standards:

India's tariff rates are still among the highest in the world, and continue to block India's attractiveness as an export platform for labor-intensive manufacturing production. Much greater openness is required which among other things would include further reductions of tariff rates to averages in East Asia (between zero and 20 percent). Most importantly, tariff rates on imported capital goods used for export, and on imported inputs into export production, should be duty free, as has been true for decades in the successful exporting countries of East Asia.

10) Lack of decision-making authority with the state governments:

The reform process so far has mainly concentrated at the central level. India has yet to free up its state governments sufficiently so that they can add much greater dynamism to the reforms. In most key infrastructure areas, the central government remains in control. Greater freedom to the states will help foster greater competition among themselves. The state governments in India need to be viewed as potential agents of rapid and salutary change. Indian states should be given more and more liberty of taking actions and active involvement in reforms. Brazil, China, and Russia are examples where regional governments take the lead in pushing reforms and prompting further actions by the central government.

11) No liberalization in exit barriers:

While the reforms implemented so far have helped remove the entry barriers, the liberalization of exit barriers has yet to take place. In our view, this is a major deterrent to large volumes of FDI flowing to India.

12) Financial sector reforms:

Reform of India's financial sector is crucial for large FDI flows into India. However, only some partial steps have been undertaken and these are by no means going to make any meaningful changes to the existing system. India's banking and insurance companies were nationalized more than two decades ago. While a number of countries had undertaken such actions in the late 1970s and early 1980s however, they have almost completely reversed their policy by now. India still continues to rely on a state-owned, state-run banking system and the insurance sector till very recently remained a government monopoly. This as one would expect has had highly adverse results, both in terms of availability of funds for investment and a negligible presence of foreign banks and no presence of foreign insurance companies in the country

13) Protection of local industry and maximization of spillovers to the domestic economy:

The policy of protecting and developing the local industries (done through the most popular restriction of treat content requirement forcing foreign companies to purchase a certain percentage of inputs locally and joint venture requirement) forces the medium or sometime large investors out of the

market from pursuing investment and IT projects. Germany has been the oldest trade partner of India but when it was to IT sector German investors viewed their long-term trade partner in skeptical light.

Through sectoral and state analysis we have arrived at the conclusion that the German companies were most interested in joint ventures and use it to over come several local constraints such as pressure politics, cultural alienation etc in the host economy. And eventually make use of joint-ventures to expand their operations locally.

Unlike the case of Germany the MGI research has found that the foreign companies usually deploy joint ventures as a pretext to out into the local set-tape of the host economy and to over come several local constraints and eventually make use of joint-ventures to expand their operations locally.

14) State Obstacles:

Taxes levied on transportation of goods from State to State (such as octroi and entry tax) adversely impact the economic environment for export production. Such taxes impose both cost and time delays on movement of inputs used in production of export products as well as in transport of the latter to the ports. Differential sales and excise taxes on small and large companies are found to be deterrent to FDI in sectors such as textile. Investments that could raise the productivity and quality of textiles and thus make them competitive in global markets remain unprofitable because they cannot overcome the tax advantage given to small producers in the domestic market.

15) India a late riser to FDI due to its inward looking policies since 1947:

Further according to Francoise Hay, university of Rennes, (paper presented in an international conference at sciences del' Homme, Paris, 28-29 September 2006) India has been by birth an inert and regulated receiver of imported technology and capital go low. German FDI to India is part of its internal syndrome towards global participation in domestic processes and systems, import substitution policy, where tax structure was complex.

The three major insustrial houses (CII, ASSOCHAM, FICCI) and Indo-German Chamber of Commerce , Indian Planning Commision and the World Bank all have similar recommendations for FDI . India still needs to formulate a comprehensive policy which not upto the intetrnational standards somehow even after 16 years of economic reforms of 1991.

The MGI McKinsey research 2005-06 recommend that to get the most from FDI, a developing nation like India should abandon its incentives and regulations and concentrate on strengthening economic foundation in particular, stabilizing the economy and promoting competitive markets. Macroeconomic instability discourages long term investment by making demand, prices, and interest rates difficult to forecast. Hence competition is essential to diffuse the impact of FDI, for without competitive markets, the entry of foreign players has little effect on inefficient domestic incumbents and their productivity. To promote competitive markets, developing nations must reduce restrictions on foreign investment, lower impact tariffs, streamline the requirements for starting new business, and encourage new market entrants.

Finally, India must continue to build a strong infrastructure, including roads, power supplies, and ports. In India, for example, the continuing liberalization of the power and telecom sectors and IT sector has triggered off an investment boom. That, in turn, became an important prerequisite for the development of the IT-and business-process-outsourcing industry. Hence, rather than holding FDI at arm's length, developing nations must embrace it.

Conclusion

CONCLUSION

India has now become a hot spot FDI destination especially when it comes to IT and IT enabled services, as Germany is to automobile India is to Information Technology. German investors have shown special interest in Technical collaborations which are usually available in big and metropolitan cities as smaller states have more ground hassles and inflexible labour laws and relatively high taxes and poor infrastructure. India's relation with Germany has been centuries old but interest and investment of Germany investors is still small and large cities and states has been the main destination of German FDI. FDI inflow in India has been gradual but has not been upto the potential of German Investors Through the analysis and data one could evidence the concept and material significance of FDI to the Indian economy and recognise Germany as of the major source of FDI and trade to India. Through the sectoral and Regional analysis one the major characteristics and feature that have come into light that German investors have shown special interest in Technical Collaborations which are usually available in bigger states and their metropolitan cities. This inclination has been noticed more towards metropolitan and some big cities probably because of more ground hassles and inflexible labour laws, poor infrastructure, relatively high taxes, low availability of technical staff etc

Despite of certain bottlenecks in the procedures, policies and infrastructure more and more investments from Germany are coming in through the automatic route (the Reserve Bank of India, not requiring

government approval). The Indian Software industry has brought about a tremendous success for the emerging economy and has grown from a mere US \$150 million in 1991-92 to US \$5.7 billion in 1999-2000. The Indian information technology industry passed \$ 50 billion mark in 2006-07. Today, software industry in India exports software services to nearly 95 countries around the world and is expected to generate total employment of around 4 million people, which accounts for 7% of India's total GDP, in the year 2008. The FICCI FDI Survey 2006, studied the actual performance of various Indian states in terms of attracting FDI and also the investors perception about the states. Microeconomic determinants such as the rate of return on investment, market growth and availability of skills and manpower do not seem to pose immediate risks to investors. In most sectors, market penetration is still low and, therefore, profit margins are not expected to narrow soon. The favorable outlook for growth and the abundant supply of skilled labour were already discussed in Chapter IV. Regarding the stability of the exchange rate, the Reserve Bank of India has been able to maintain currency stability, even in recent periods of regional or global turmoil.

The trend now is gradually turning around into a favourable matrix for those who are willing to brave the apparent risks and constraints in anticipation of gainful returns. In the Indian economy states have been showing considerable interest in attracting foreign investments. India has 29 states and 6 union territories blessed with several investment opportunities depending on their geographical location and availability of natural resources. A healthy

competition has emerged among states to attract investment in their respective states enhanced by technological advancements. The Mumbai Regional Office of RBI registered maximum inflows of about 29% of the total inflows received during 2006-07. New Delhi, Chennai, Bangalore and Hyderabad are the other major RBI's Regions which have received FDI inflows during the same period.

There are rather significant differences in reform interest and economic performance between a large part of northern India and southern India where Karnataka, Tamil Nadu and Andhra Pradesh are quite dynamic now in trying to get the infrastructure, and the policy regime right to attract large-scale foreign investment. In the north, in Bihar, Uttar Pradesh one does not see the same kind of reform dynamism and the results are therefore poor in terms of economic growth. These differences will be noticed politically sooner rather than later, (as inequalities will become glaring) and the states that are ahead will be rewarded with better performance and the states that are behind will find that there is the demand to catch up with the states that are growing. That will spur a kind of competition among the Indian states and make the reform process go much faster. States that are ahead in the reform efforts right now are going to find that if they move against the populist policies and set up regular markets for services, such as power and water then they are going to be ahead of the rest in the game

State-wise approvals of FDI in India suggest differing performances among Indian states. States are now in competition with one another to attract private investment, both domestic and foreign. From the long-term

development point of view, we are of the view that India has tremendous growth prospects through export-led growth and that export-led growth involves a broad range of sectors, both traditional and new. The most interesting by far of the new sectors is software and information technology. India is becoming one of the most important players of the world in this sector and it is the fastest growing foreign exchange earner for India. Export-led growth in services is one of the most interesting developments, and export-led growth in manufactures, the more traditional textiles and apparel, in electronics and other labor-intensive operations remains an area where India could do a lot more than in the past.

According to Deutsche Bank Research approximately 80% of the German companies in India are from the manufacturing sector mostly in the fields of electric & electronical and mechanical engineering including auto components. Five major sectors that have attracted highest FDI into India during the year 2006-07 are services, electrical equipments (including computer software & electronics), telecommunication, construction and real estate activities. Nearly 40% of roughly 20,000 German firms surveyed by Deutsche Industries- and Handelskammertag (DIHK) expressed their concrete plans to tap new markets abroad. Of those who plan to increase their investments abroad, many are considering transferring capital and knowledge-intensive functions abroad such as administration and R&D. At the same-time might take several years before large investment flows enter the country, as many investors still see India as an attractive location in the medium to long

term but less so in the short run. Taking into account the factors which investors consider as key for their investment decision the prospects for FDI in India are good.

A McKinsey survey of 2006-07 incidentally verifies the finding of FICCI's survey as analysed and mentioned in the preceding sections of the chapter. Although, the MGI research shows that regardless of the policy regime, the industry, or the procedural constraints, FDI can benefit a developing nation like India immensely. However, to make the most out of mutual trade business, it is emphasized that the government and the appropriate agencies must strengthen the foundations of their economies, including taking care of the above mentioned obstacles namely that of the infrastructural problems, the legal and regulatory environment, and the procedural matters.

The FDI regime in India is still quite restrictive. Foreign ownership of between 51 and 100 percent of equity still requires a long procedure of governmental approval. In our view, there does not seem to be any justification for continuing with this rule. This rule should be scrapped in favor of automatic approval for 100-percent foreign ownership except on a small list of sectors that may continue to require government authorization. The banking sector, for example, would be an area where India would like to negotiate reciprocal investment rights. Besides, the government also needs to ease the restrictions on FDI outflows by non-financial Indian enterprises so as to allow these enterprises to enter into joint ventures and FDI arrangements in other countries.

Further deregulation of FDI in industry and simplification of FDI procedures in infrastructure is called for.

With the Indian IT industry posting growth rate of such as 32% in 2006-07 IT field has become a large point of interest and it is a perfect time for German investors to try their proves in the Indian IT sector. Still it is not too late for German investors there exist opportunities in the enterprise application integration and other tested fields of IT and IT-enables services where some of the world biggest players are operating successfully in areas like:

- Call Centres
- Business Process Outsourcing
- System Integration
- Enterprise Solutions
- E-Commerce Solutions
- Communication and Media
- Artificial Intelligence
- Packages Software Solutions

According to Nasscom estimates, India currently has a share of 0.5% in the global market for newer services but this can reach 2-3% by the end of 2008. India with it excellent physical, civic and social infrastructure and a large pool of talented, educated, hardworking, English speaking workforce is well positioned to capture a substantial share of the ITES market thereby generating massive employment opportunities in ITES sector . An Indian market has lots to offer and attract FDI investors. India is now the hotspot for investment as

70% of foreign investors are making profits from their India operations and 83% are considering expansion of business. Most of the investors including Germany find the Indian market as a high growth market and express confidence that the 8% GDP growth would be surpassed in 2006-07 as well. This prognosis is revealed by **FICCI's annual Foreign Direct Investment (FDI) Survey 2006**

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